

Socio-Demography 2020

Mind the Gap

Javier Polavieja

The D-Lab

Discrimination & Inequality Lab



uc3m | Universidad Carlos III de Madrid

Sessions 1&2-Outline

1. What is gender?
2. Gender Gaps in Employment
3. Gender and education
4. Gender gaps in firm-provided training and skill-specialization
5. Gender Gaps in hours worked
6. Gender gaps in timetables
7. The unequal distribution of housework
8. Occupational segregation
 - Vertical segregation
 - The dissimilarity index
9. Gender gaps in entrepreneurship
10. Gender Gaps in Pay
 - Decomposing the gender wage gap: Explained and unexplained components
11. The mommy penalty

Gender

- Sex= Biological distinction
 - Gender= socially-constructed expressions and expectations of *masculinity* and *femininity*, which are justified by association to biological distinctions and hence appear as natural and immutable (Ann Oakley 1972)
- Gender thus reflects cultural dominant ideas about...
- gender roles (normative expectations about men and women's position in different social domains)
 - gender-specific status beliefs (e.g. the idea that men/women are better/worse at certain tasks and the prestige associated to typically masculine/feminine occupations and chores)
 - gender-biased expectations about self-competence (e.g. girls miss-perception that they are worse than boys in mathematics)
-These beliefs are acquired through socialization and social interaction processes (which will be discussed in lesson 3)



Gender is thus an analytical concept that can help us identify persisting inequalities between men and women



....Such inequalities can respond to complex factors, including employers' (customers' and co-workers') discrimination, socio-structural barriers, and women's own preferences....



...One way of referring to such differences without invoking any particular explanation is by using the word “gap”



In today's lecture we will review different gender gaps by providing comparative evidence (alternative explanations for these gaps will be discussed in the next 5 sessions)

Gender gaps in Employment

Despite impressive gains women still show lower employment and LM participation rates and different employment patterns

Main LM indicators

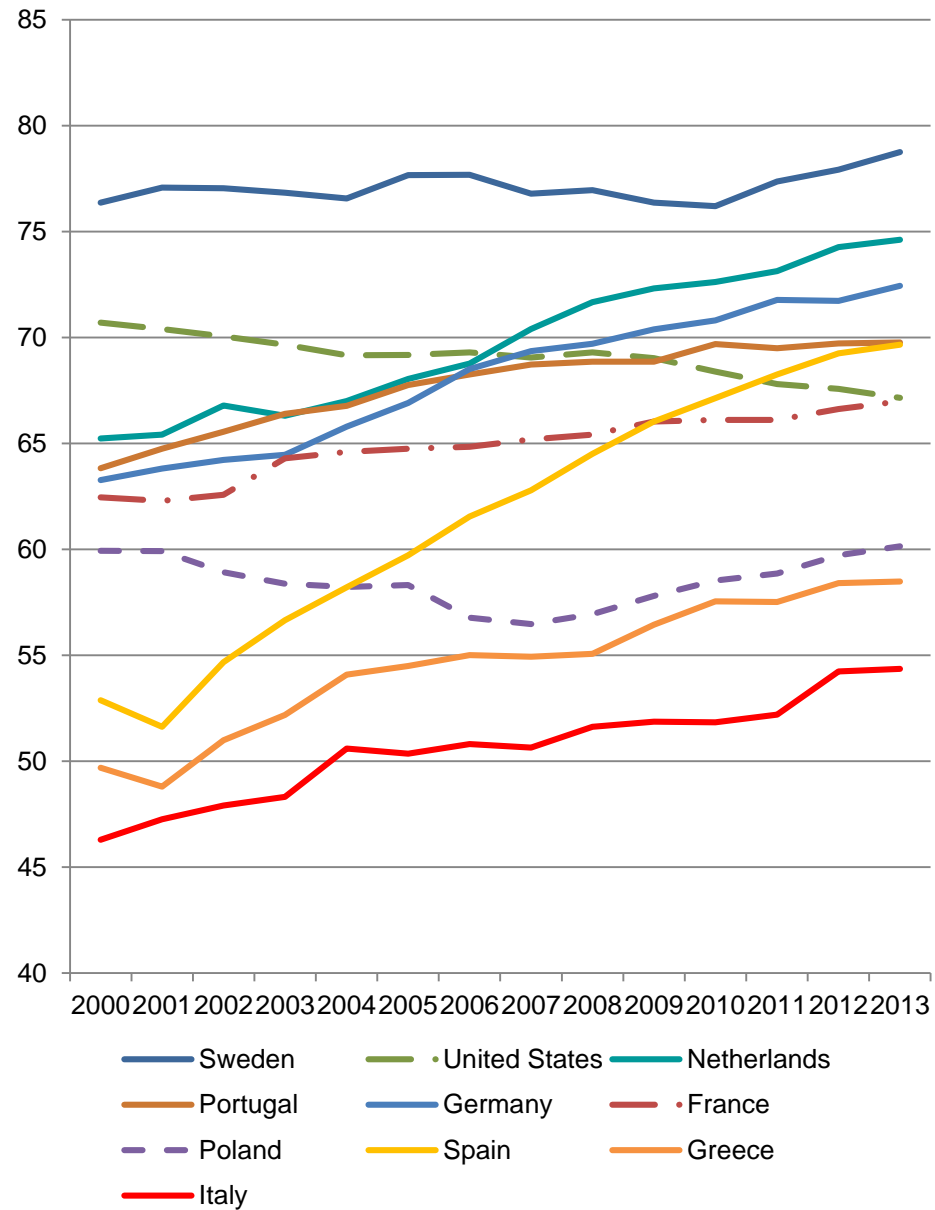
$$\text{Participation rate} = \frac{\text{N of people in the labour force (employed + unemployed)}}{\text{Total N of working-age population (15-64)}} \times 100$$

$$\text{Employment rate} = \frac{\text{N of people employed}}{\text{Total N of working-age population (15-64)}} \times 100$$

$$\text{Unemployment rate} = \frac{\text{N unemployed}}{\text{N people in the labour force}} \times 100$$

Female Participation Rate

(15-64, Selected OECD countries)



... let's take a longer time perspective

Female activity rate and ratio female/male in the activity rate in Spain and the US, 1955-2012

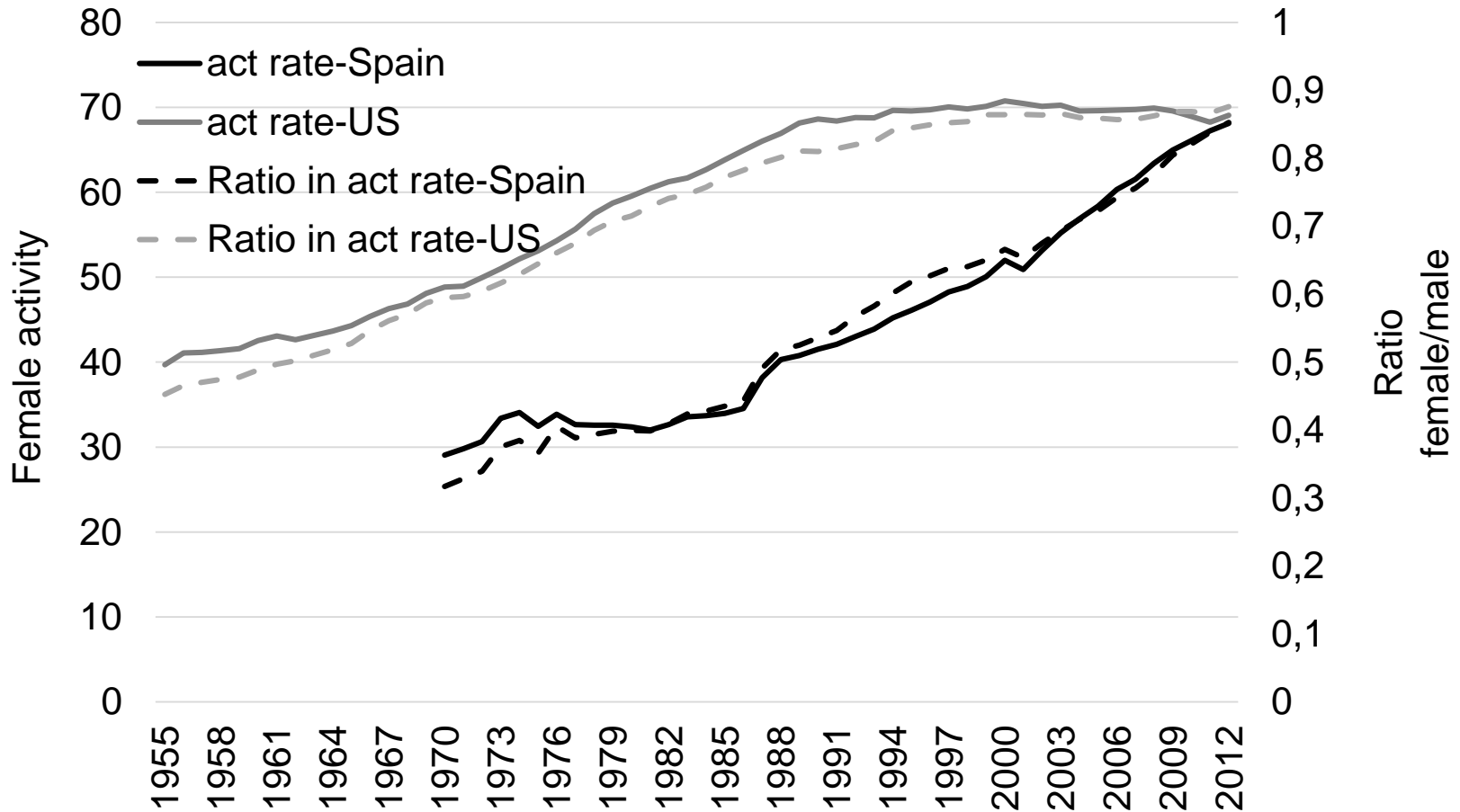
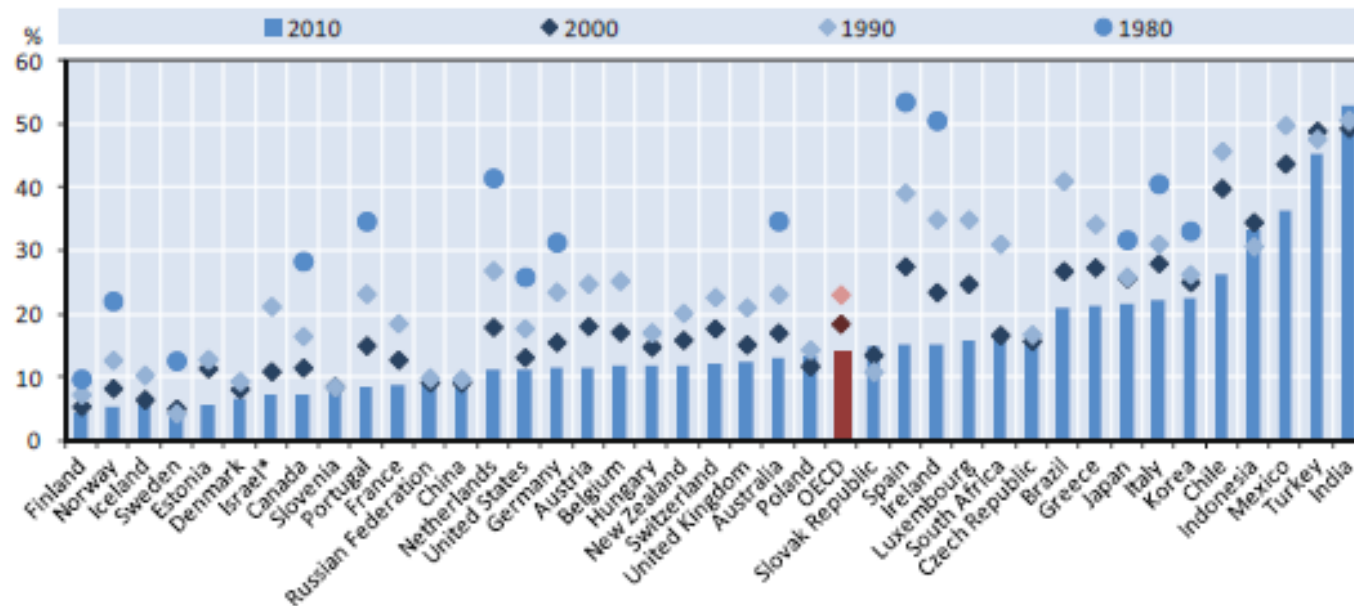


Figure 3.1.1.B) In the OECD, gender gaps in labour force participation vary widely across countries

Gender gap^a in labour force participation in OECD and EE countries^c, 15-64 years old, 1980 - 2010



a. Difference between male and female labour participation rates for 15-64 years old.

b. Unweighted averages for countries in each region; Country groupings are defined in the Annex to part 2. Regions are ordered by increasing 2010 enrolment ratios.

c. Countries are ordered by increasing 2010 gender gap in labour force participation.

*Information on data for Israel: <http://dx.doi.org/10.1787/888932315802>.

Source: OECD (2012b), OECD Employment database and ILO (2012a), KILM indicators.



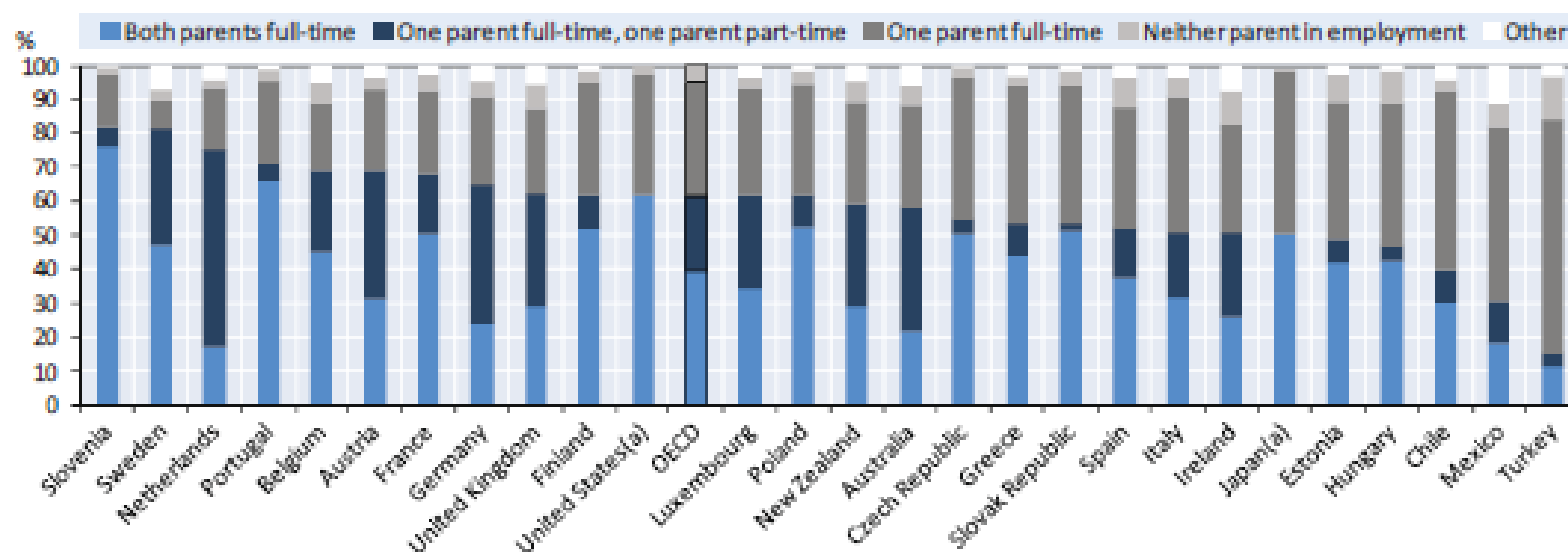
Rates of FLFP have been rising and gender gaps in LFP closing in most countries



As a result, today dual earner families are
the norm in most countries

Figure 3.8.1. In most OECD countries, dual-earner families are the norm

Employment patterns among couple families with children aged 0-14, 2009



Note: Countries are ordered by descending proportion of both parents employed (full-time or part-time)

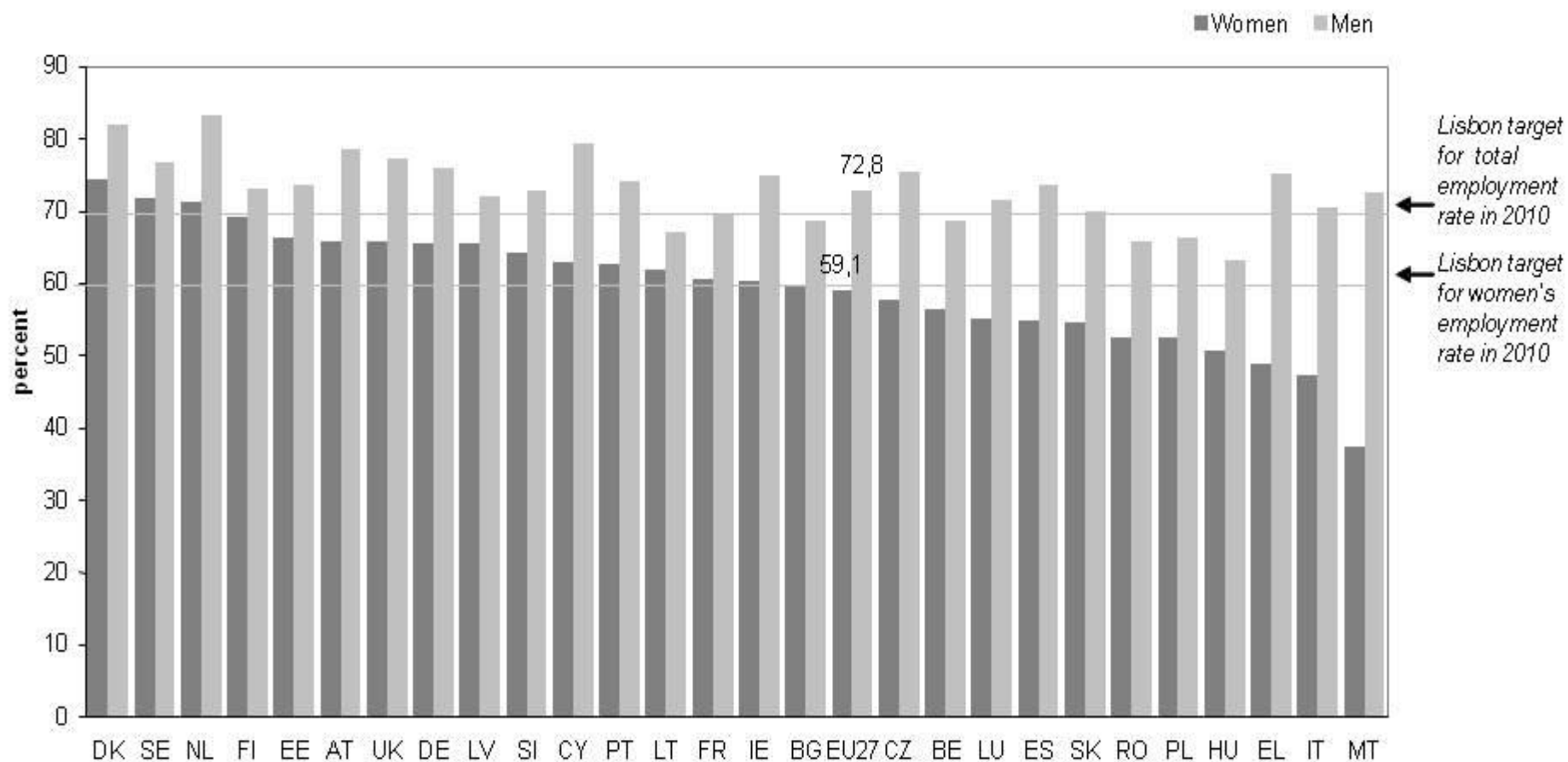
a. Unable to distinguish between full-time and part-time work.

Source: OECD 2012c, OECD Family database, indicator LMF2.2.



Yet large country differences in FLFP and
FERs remain

Employment rates (women and men aged 15 - 64) in EU Member States- 2008



Source: Eurostat, Labour Force Survey (LFS), annual averages.



FLFP and FER rates are crucially affected
by the arrival of children (see below)



A key driver of the observed increases in FLFP over time is educational expansion

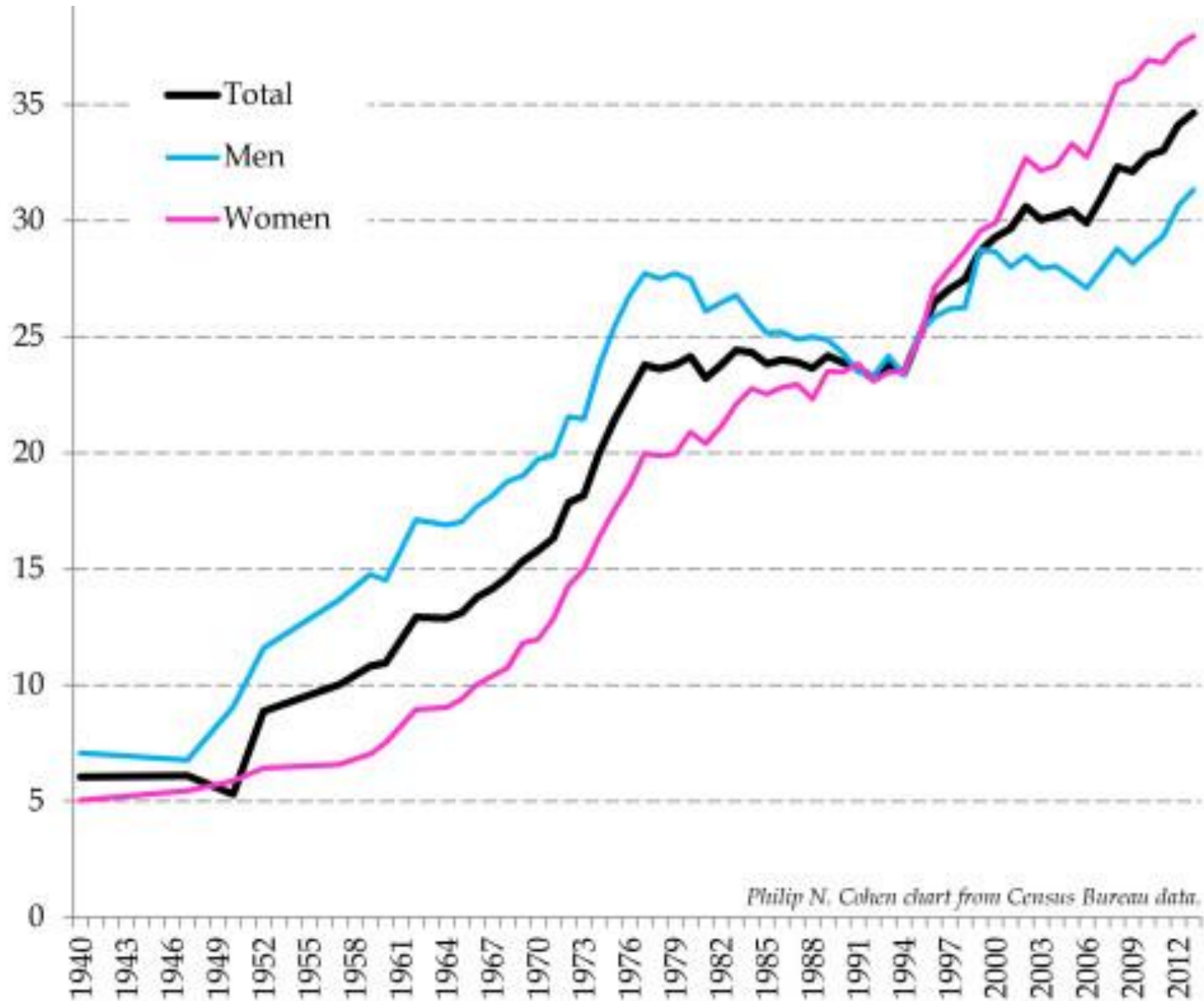
Table LMF1.6.A. Gender gap in employment rates by educational attainment, 2013^a

	Below upper secondary			Upper secondary or post-secondary non-tertiary			Tertiary Education		
	Gender			Gender			Gender		
	Male	Female	Gap	Male	Female	Gap	Male	Female	Gap
Australia	69.3	52.2	17.1	85.5	67.3	18.2	89.4	78.9	10.5
Austria	63.1	50.8	12.3	82.0	74.6	7.4	89.3	83.4	6.0
Belgium	56.9	37.9	19.0	79.4	67.1	12.3	87.2	81.5	5.7
Canada	64.6	45.7	19.0	79.4	68.4	11.0	85.3	79.2	6.1
Chile	83.7	40.0	43.7	86.2	56.1	30.1	91.7	77.8	13.9
Czech Republic	52.5	35.7	16.8	84.5	67.9	16.7	92.7	77.3	15.5
Denmark	67.6	53.9	13.7	82.6	75.1	7.5	88.4	85.0	3.4
Estonia	62.5	50.7	11.8	79.1	68.6	10.5	87.9	80.2	7.6
Finland	58.2	48.3	9.9	76.3	70.4	5.9	86.3	82.0	4.3
France	61.8	47.6	14.2	76.7	69.4	7.3	87.3	81.9	5.4
Germany	67.4	50.8	16.6	83.0	74.7	8.3	91.1	83.9	7.2
Greece	57.5	33.3	24.1	66.4	42.5	23.9	74.5	63.9	10.6
Hungary	47.5	33.6	13.9	75.0	62.1	12.9	87.0	75.2	11.8
Iceland	82.1	67.6	14.5	88.0	81.9	6.0	93.9	87.3	6.5
Ireland	57.1	34.4	22.7	73.6	58.2	15.4	84.8	76.3	8.5
Israel (b)	63.5	31.1	32.5	76.6	66.0	10.6	89.3	81.8	7.6
Italy	64.6	34.1	30.5	79.0	60.4	18.7	83.2	73.7	9.5
Japan	--	--	--	85.7	63.7	22.0	92.5	69.1	23.5
Korea	77.7	57.7	20.0	84.2	57.9	26.3	89.6	62.3	27.3
Luxembourg	72.8	51.7	21.1	78.6	62.8	15.8	89.3	80.0	9.3
Mexico	87.0	43.9	43.1	90.6	55.6	35.1	87.5	71.4	16.0
Netherlands	71.9	50.6	21.3	82.9	73.4	9.4	89.7	86.1	3.6
New Zealand	76.5	61.5	15.0	89.4	71.3	18.1	90.2	82.2	8.0
Norway	66.2	58.0	8.2	85.5	76.9	8.7	91.3	88.1	3.2
Poland	49.0	28.3	20.7	74.2	55.0	19.2	89.5	81.5	7.9
Portugal	67.2	55.8	11.4	77.9	74.1	3.8	82.4	78.8	3.6
Slovak Republic	36.8	27.3	9.5	76.9	62.2	14.8	85.7	74.4	11.3
Slovenia	55.1	36.4	18.7	73.9	63.8	10.1	86.3	82.0	4.3
Spain	55.8	40.1	15.7	69.8	59.1	10.7	79.9	73.2	6.7
Sweden	72.0	50.1	21.9	85.9	79.0	6.9	90.4	88.3	2.1
Switzerland	77.1	63.3	13.9	87.8	76.8	11.0	92.9	83.8	9.1
Turkey	75.1	27.6	47.5	81.5	31.0	50.5	85.1	65.5	19.5
United Kingdom	66.8	49.3	17.5	84.2	72.5	11.7	89.7	80.2	9.4
United States	64.0	40.6	23.4	73.5	61.9	11.6	85.8	75.7	10.1
OECD average	64.6	45.3	19.3	80.3	65.8	14.5	87.7	78.6	9.1

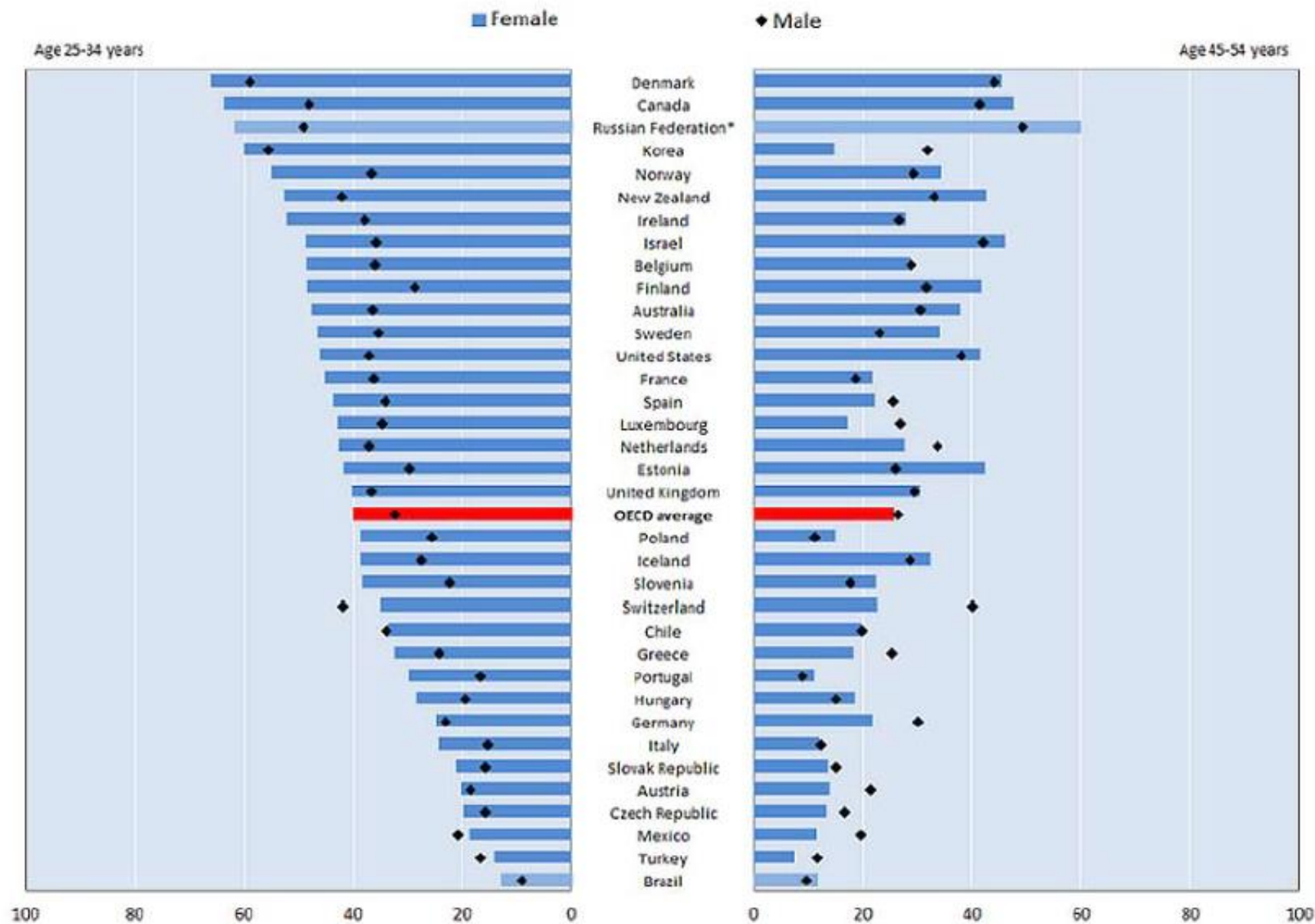
Education

Gender gaps in education are reversing for younger cohorts

Percent of 24-34 year-olds with a bachelors degree or higher education: 1940-2013, US



Panel B: Proportion of adults with tertiary education, 2008



Source OECD 2011



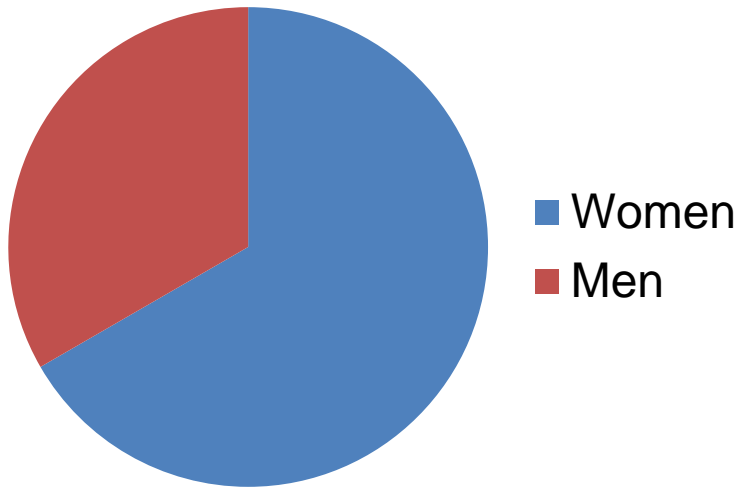
Women have made impressive gains in education in most OECD countries



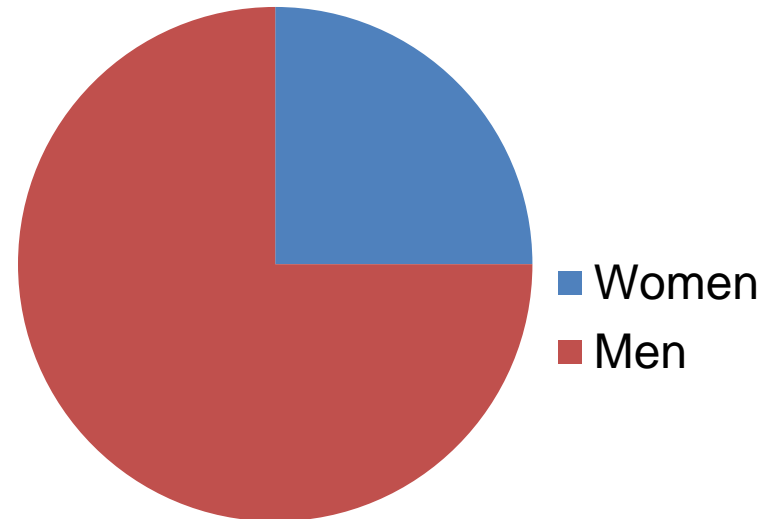
But women still underrepresented in
STEM (Science, Technology, Engineering and
Mathematics)

Bachelor's Degrees by Gender, US

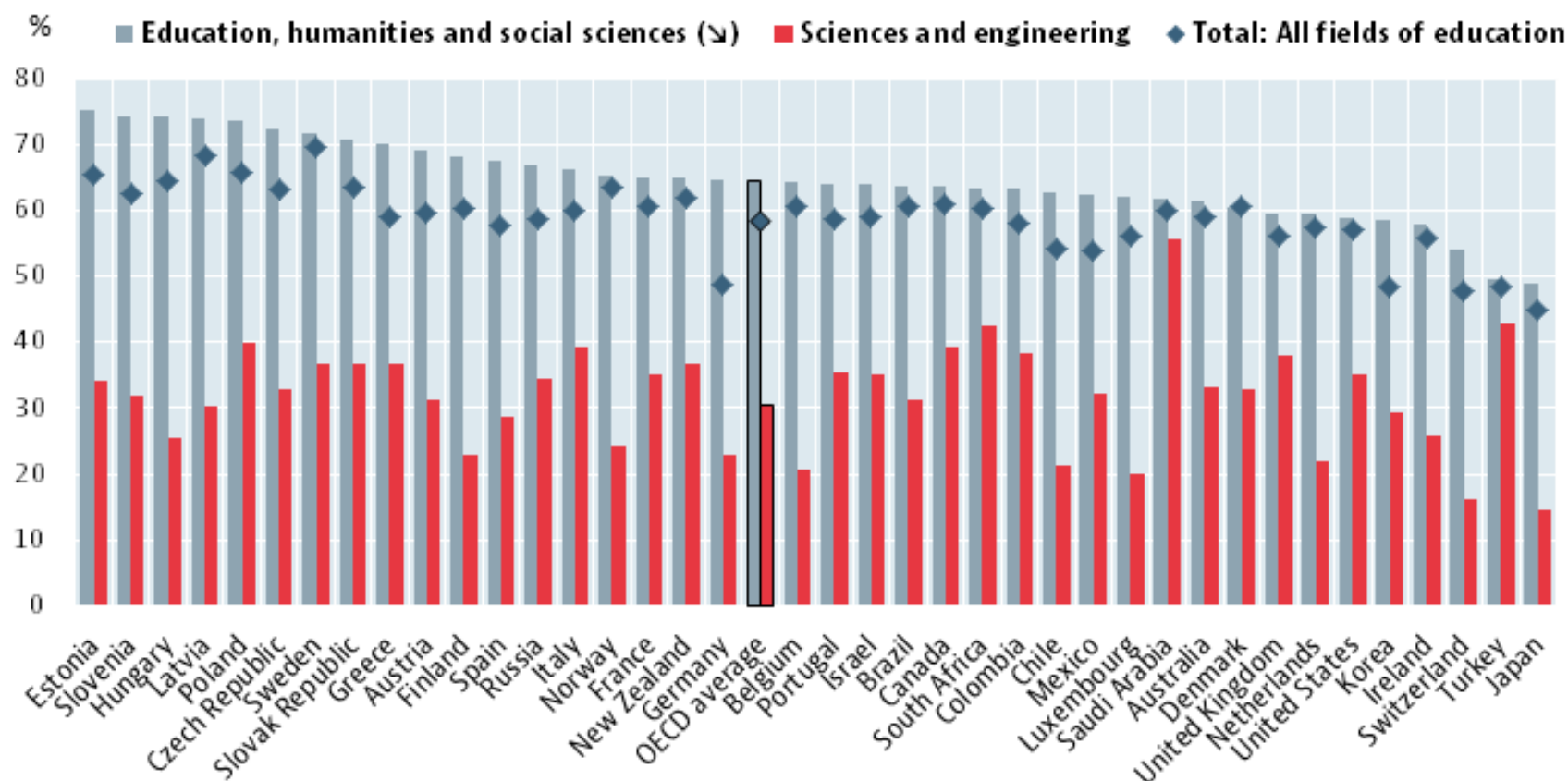
Arts, Humanities, Education, Health & Welfare



Science, Math & Technology



Share of female bachelor's graduates by field of study (2013)



For more detailed info on gender differences by field of study, see:

<https://www.oecd.org/gender/data/shareofwomengraduatesbyfieldofeducation.htm>



Gender differences in field study have
consequences for occupational gender
segregation



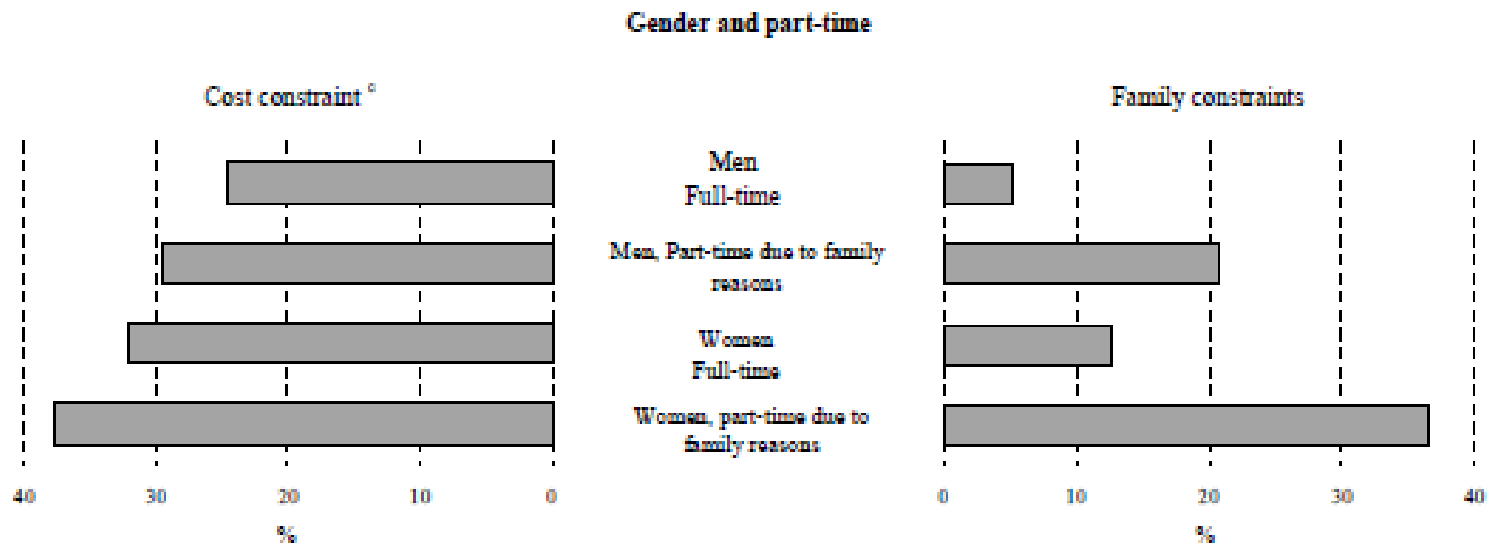
If wages are higher in occupations requiring STEM skills, gender differences in field of study will translate into lower wages

Gaps in skill-specialization and firm-provided training

Women have lower access to firm-provided training and are underrepresented in jobs requiring skill-specialization

Women face greater constraints than men to undertaking firm-specific training

Probability of reporting a specific constraint, conditional to being "constrained"^a



Women are underrepresented in occupations requiring high levels of skill-specialization

Table 2. Significant Gender Differences in Skill Specialization and Household Supply, Europe 2004-2005

Variable	WOMEN			MEN		
	N	Mean or %	Std. Dev.	N	Mean or %	Std. Dev.
Skill Specialization (Job-Skill Score) ⁽¹⁾	24,585	-0.018	0.845	20,969	0.014	0.834
Years of schooling	24,317	11.63	3.82	20,731	12.00	3.81
Housework supply ⁽²⁾	24,092	2.58	2.07	20,386	1.07	1.36

Notes: ⁽¹⁾ Average Job-Skill Scores for ISCO-88 4-digit occupations (n=451) using men's responses only. Scores combine occupational averages for job-learning time, continuous learning requirements and job-skill training. The skill specialization index (JSSo) ranges from -2.45 to +4.65. Gender differences are sig. (Ha: $\text{diff} \neq 0$ $\Pr(|T| > |t|) = 0.000$); ⁽²⁾ Self-reported housework hours on a typical weekday. Weighted.

Source: Polavieja (2012) from European Social Survey, Second Round (2004-2005).

Table 1. The Top Twenty Occupations according to Skill Specialization (Job-Specific Skill Score, JSSo), Europe 2004-2005

ISCO-88 Occupations (4 digits)	ISCO Code	Average JSS Score	Average years of schooling
Riggers and cable splicers	7215	4.65	10
Aircraft engine mechanics and fitters	7232	2.86	12
Farming and forestry advisers	3213	2.75	13
Photographic products machine operators	8224	2.73	11
Service, shop and market sales workers	5000	2.66	14
Hygienists, health environmental officers	3222	2.65	15
Well drillers, borers and related workers	8113	2.54	11
Physics, mathematicians, engineering science professionals	2100	2.48	18
Mining engineers, metal and related professionals	2147	2.34	14
Biologists, botanist, zoologists and related professionals	2211	2.34	19
Appraisers, valuers and auctioneers	3417	2.29	14
Film, stage and related actors and directors	2455	2.26	15
Dentists	2222	2.25	17
Medical doctors	2221	2.24	19
Electronics and telecommunications engineers	2144	2.20	16
Fire-fighters	5161	2.20	12
Psychologists	2445	2.18	17
Legal professionals	2420	2.17	17
Mathematicians and related professional	2121	2.1	17
Physics, chemists, related professional	2110	2.09	21

Note: Calculated using responses on job-learning time, continuous learning and incidence of job-skill training.

Source: Polavieja (2012) using European Social Survey, Second Round (2004-2005).



If wages are higher for workers with specialized skills, gender differences in firm-provided training and skill specialization will translate into lower wages for women

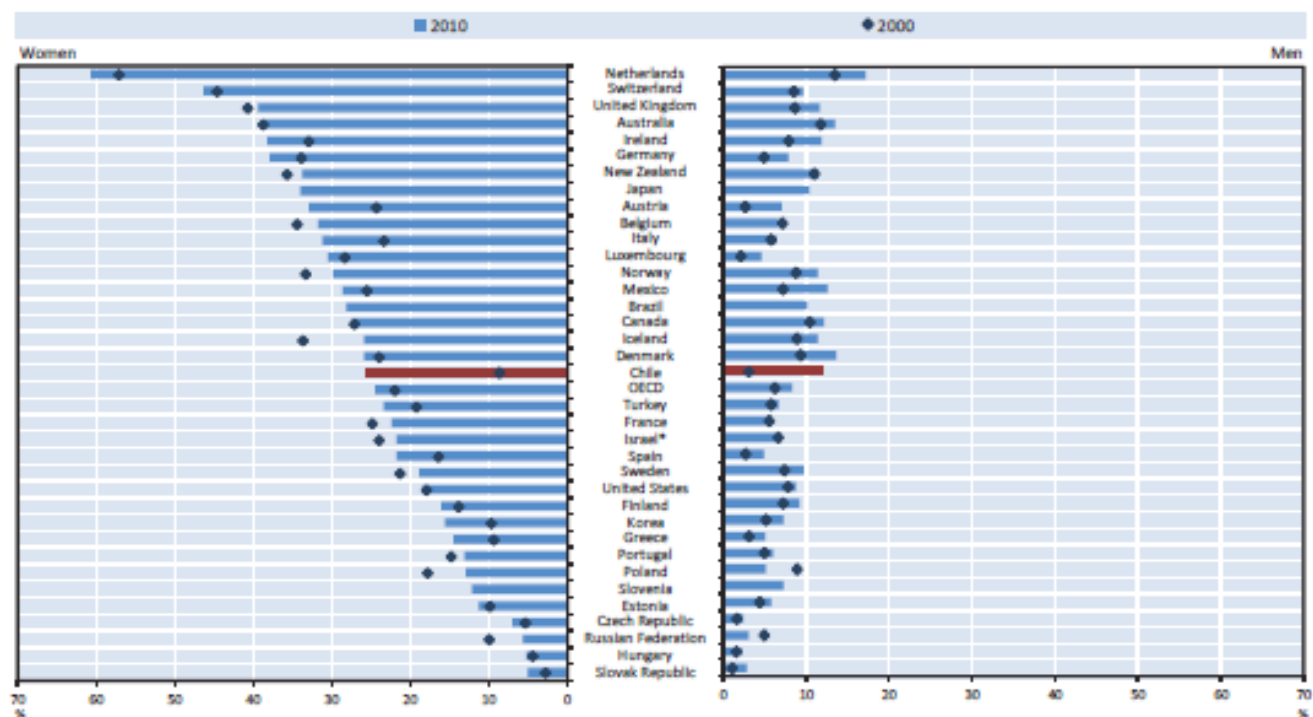
Gender gaps in hours worked

Women work shorter hours and
are vastly over-represented in
part-time employment

Large gender gaps in part-time employment

Figure 3.2.1. There are large gender gaps in part-time work^a

Panel A. Percentage of men and women in part-time employment^a, 2000 and 2010



Note: Countries are ordered by decreasing proportion of women working part-time.

a. Part-time employment refers to persons who usually work less than 30 hours per week in their main job.

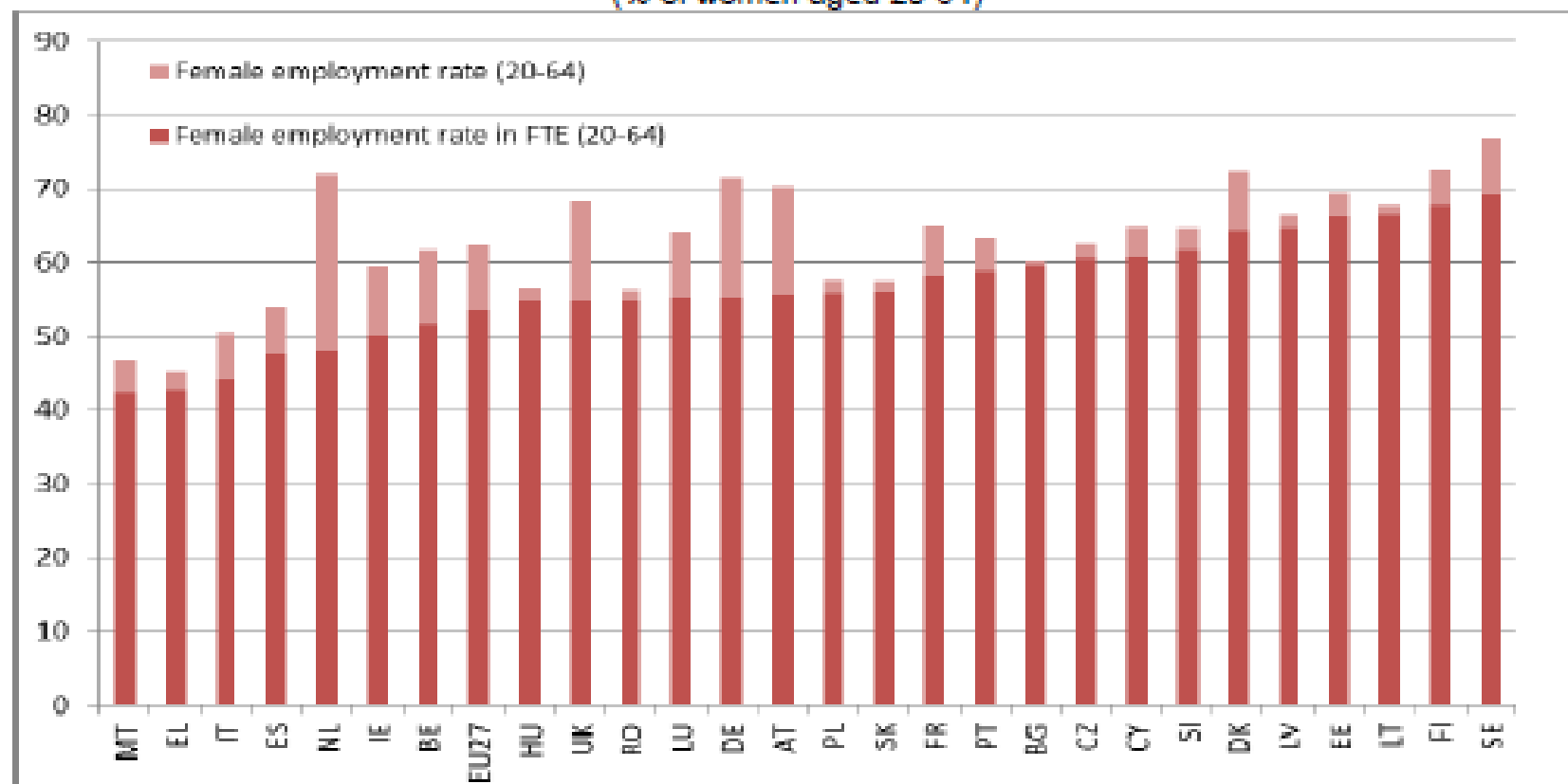
b. The employment/population ratio (EPR) is defined as the proportion of the employed in the working age population.

c. The full-time equivalent rate (FTE) is calculated as the employment/population ratio, multiplied by the average usual hours worked per week per person in employment, and divided by 40.

* Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

Source: OECD (2012b), Employment database.

Figure 2. Employment rate and employment rate in full-time equivalent (FTE) in 2012
(% of women aged 20-64)



Source: Eurostat, LFS 2011

NOTE: The full time equivalent employment rate is the ratio between the number of jobs converted into full-time and the total population. The number of people in full-time equivalent is obtained with the part-time rate recalculated: a person working half-time count for 0.5, or a person working 80% count for 0.8...



Note contrast between NL and SE: Both have very high FLFP and FERs but 60% of Dutch women are employed part-time while only 18% of Swedish women are



Scandinavian and former communist countries
show the highest rates of full-time employment
for women



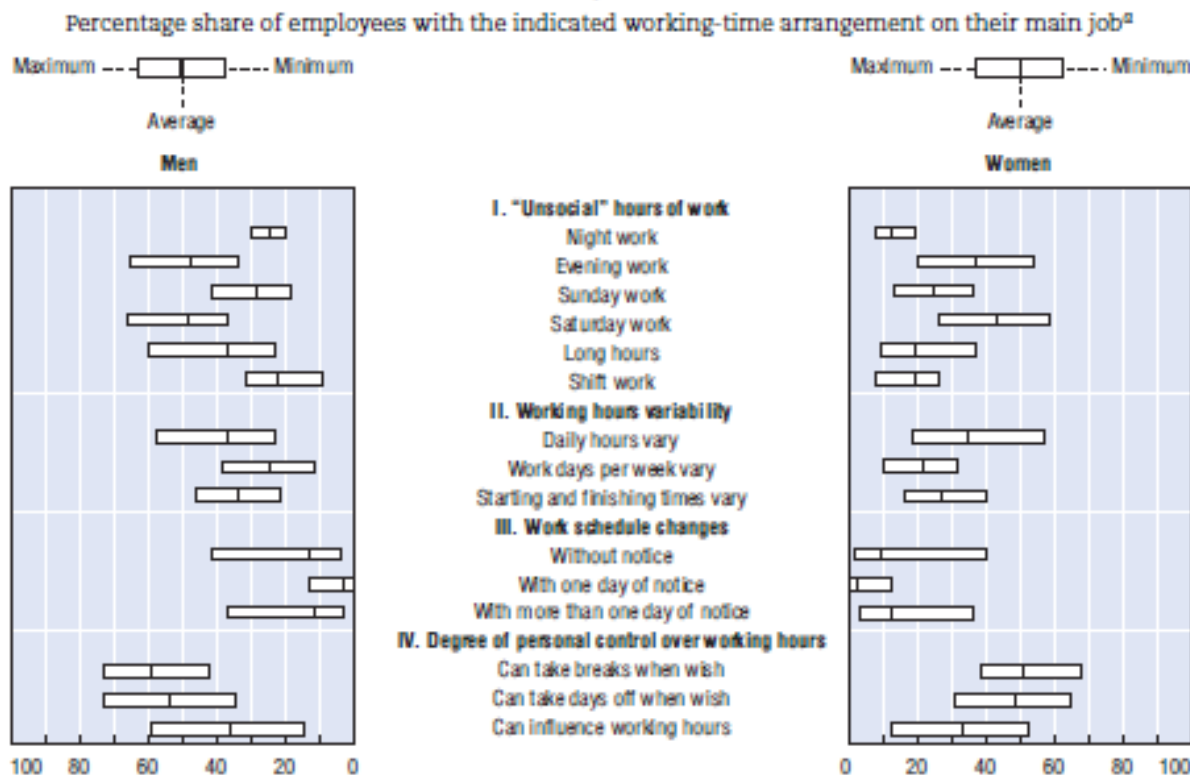
If firms pay more per hour to full-time workers
then gender gaps in hours worked will
translate into larger gender pay gaps

Different timetables

Men are more likely to work
unsociable and irregular hours
and to undertake shiftwork

Men are more likely to work unsociable and variable hours

Chart 1.8. The incidence of different working-time arrangements in Europe, 2000/2001



a) Minimum, maximum and (unweighted) average values for Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Spain, Sweden and the United Kingdom.

Source: Secretariat estimates based on microdata from the Third European Working Conditions Survey 2000/2001 and the Survey of Working Conditions in the Candidate Countries as provided by the European Foundation for the Improvement of Living and Working Conditions.



If firms pay bonuses for unsociable hours
timetable gaps will translate into larger pay
gaps

Gender gaps in unpaid work

The unequal distribution of
household chores

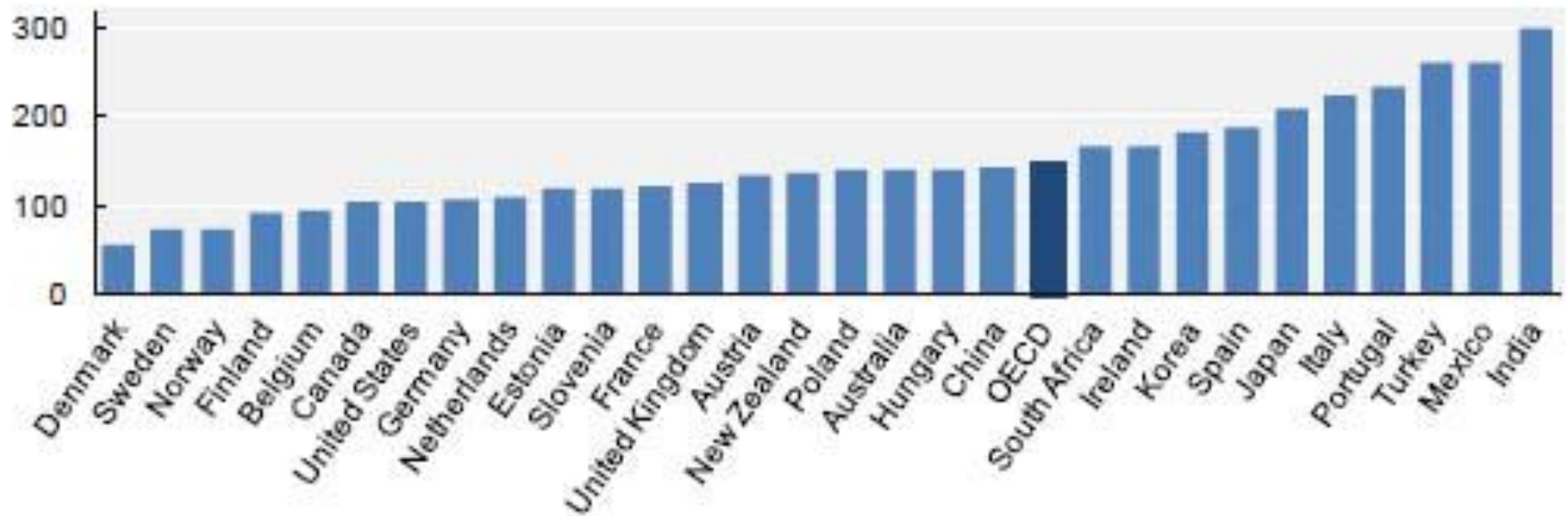


Women do less hours of paid work but
more hours of unpaid work everywhere

The unequal distribution of housework

Figure 4. Women do more unpaid work than men in all countries

Female less male unpaid working time in minutes per day, for the population aged 15-64 over the period 1998-2009





Scandinavian countries appear again as the most egalitarian regarding the distribution of unpaid work



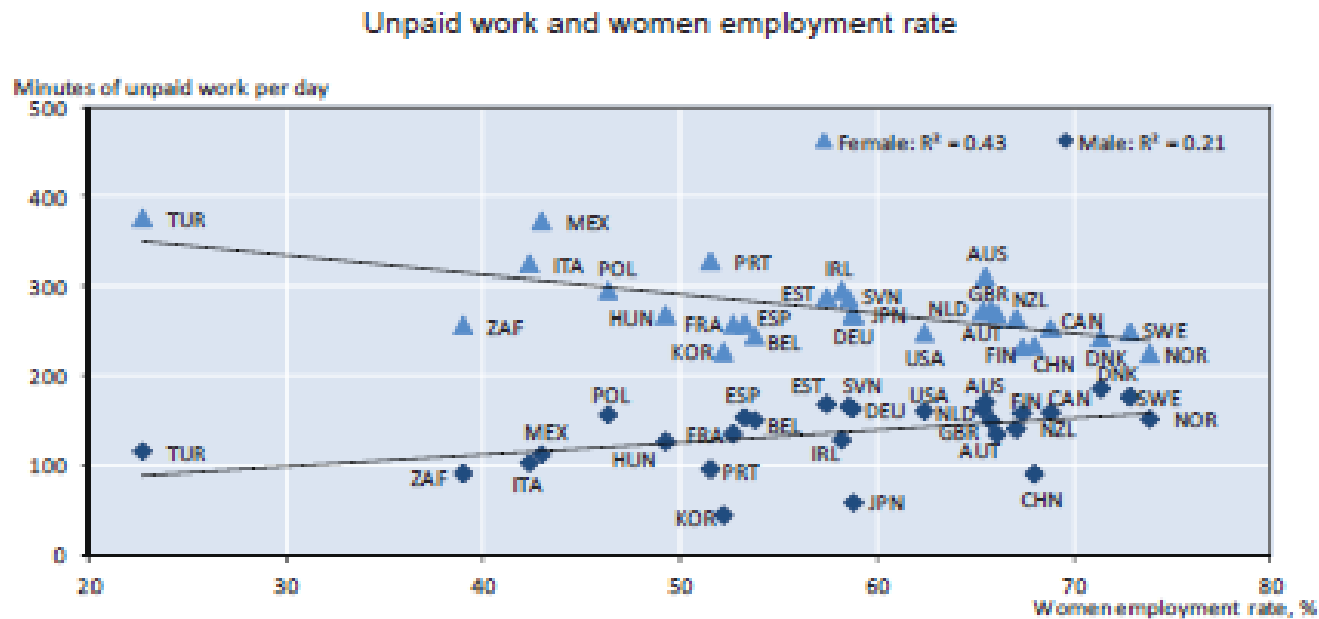
An unequal distribution of housework and family responsibilities can reduce women's available time and energy for paid work



Gender gaps in paid and unpaid work
reinforce each other

Unpaid and paid work are inversely correlated

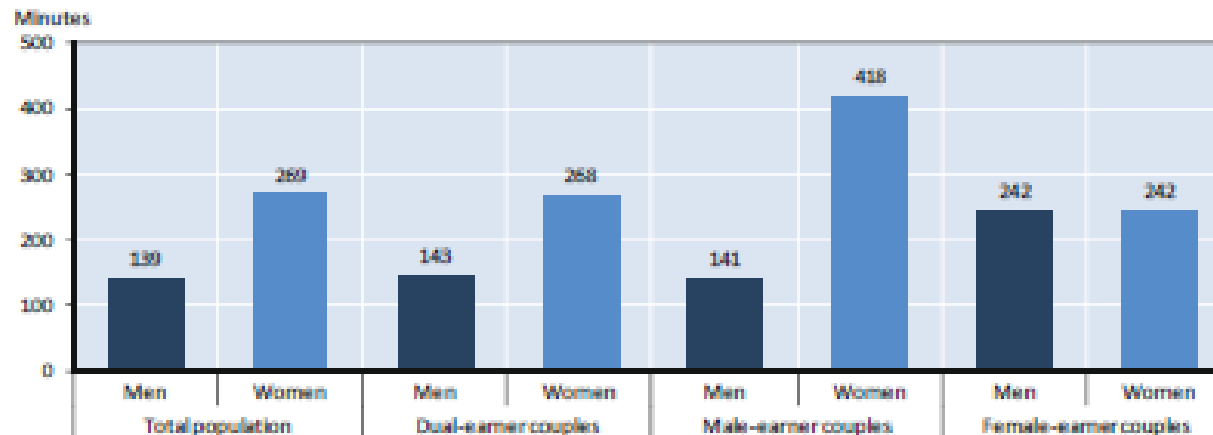
Figure 3.7.2. Women's unpaid work decreases with increases in the national levels of women's employment, but they always do more unpaid work than men



Source: OECD's Secretariat estimates based on national time-use surveys and OECD Labour Force Surveys for employment rates.

...but employed women always do more than their spouses when both work

Figure 3.7.3. Regardless of a woman's employment status, men do less unpaid work than their spouses
Minutes devoted to unpaid work per day by gender, for single- versus dual-earner couples (OECD average)



Source: OECD's Secretariat estimates based on national time-use surveys.

Table 5.6 Household tasks undertaken by men and women, 1994–2012[2]

Individual reported as always/usually undertaking task	1994	2002	2006	2012
Does the laundry	%	%	%	%
Always/usually man	1	6	5	6
Both equally	18	15	17	20
Always/usually woman	79	78	74	70
Makes small repairs around the house	%	%	%	%
Always/usually man	75	71	73	75
Both equally	18	17	14	10
Always/usually woman	5	7	8	7
Cares for sick family members	%	%	%	%
Always/usually man	1	3	3	5
Both equally	45	36	44	38
Always/usually woman	48	48	43	36
Shops for groceries	%	%	%	%
Always/usually man	6	8	8	10
Both equally	52	45	47	43
Always/usually woman	41	45	41	44
Does the household cleaning	%	%	%	%
Always/usually man	n/a	5	6	8
Both equally	n/a	29	30	29
Always/usually woman	n/a	59	58	56
Prepares the meals	%	%	%	%
Always/usually man	n/a	11	11	16
Both equally	n/a	29	27	27
Always/usually woman	n/a	58	58	55
<i>Weighted base</i>	<i>704</i>	<i>1339</i>	<i>1278</i>	<i>679</i>
<i>Unweighted base</i>	<i>601</i>	<i>1146</i>	<i>1147</i>	<i>598</i>

Base: respondents in heterosexual couples

The percentages in the table do not add up to 100 per cent because we have not shown the very few responses that say they can't choose or the task is done by someone else

n/a = not asked

Men and
women do
different
household
chores, UK
1994-2012

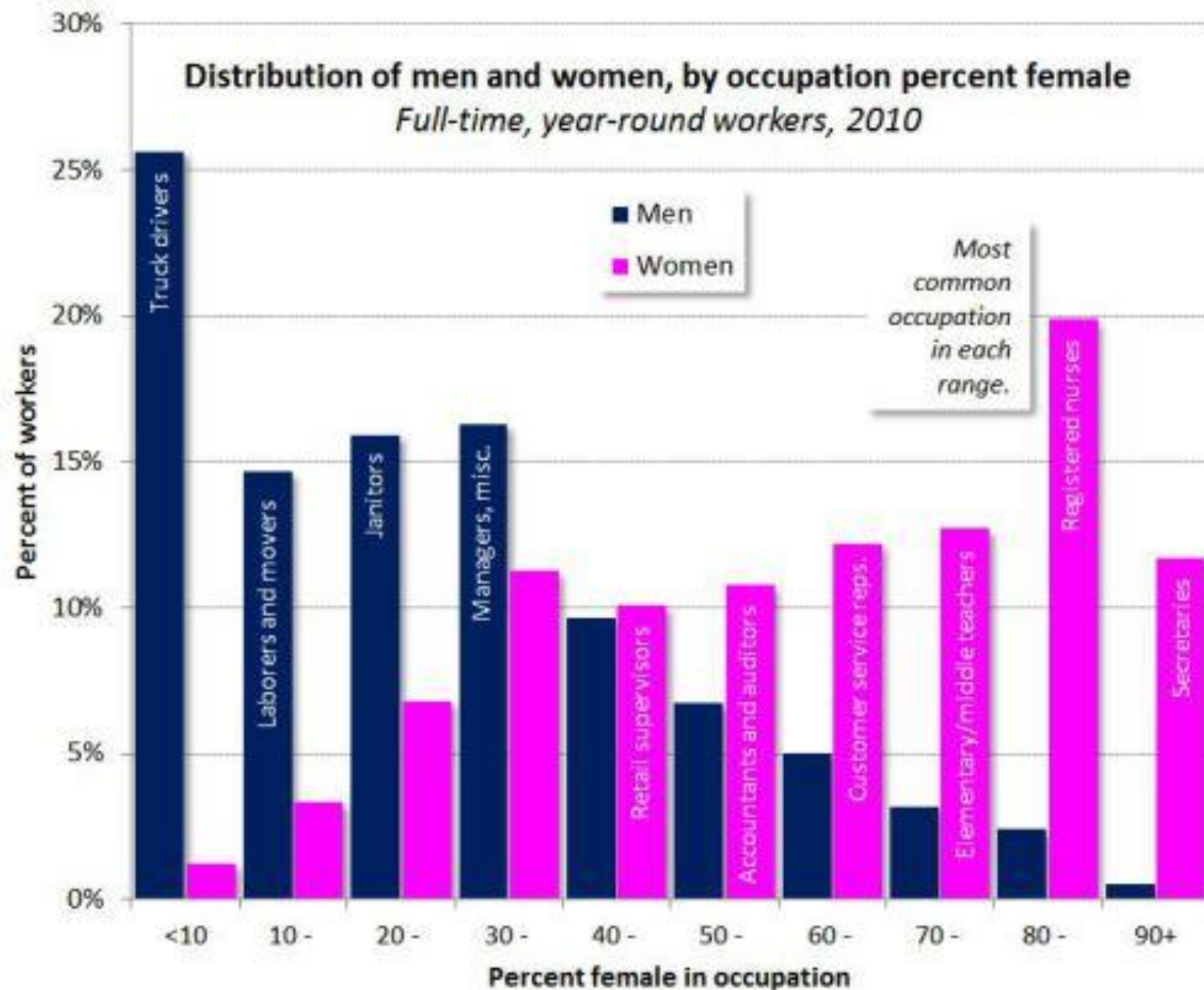
Source: Scott and Clery, BSA 2015

Occupational segregation

Men and women concentrate in
different occupations

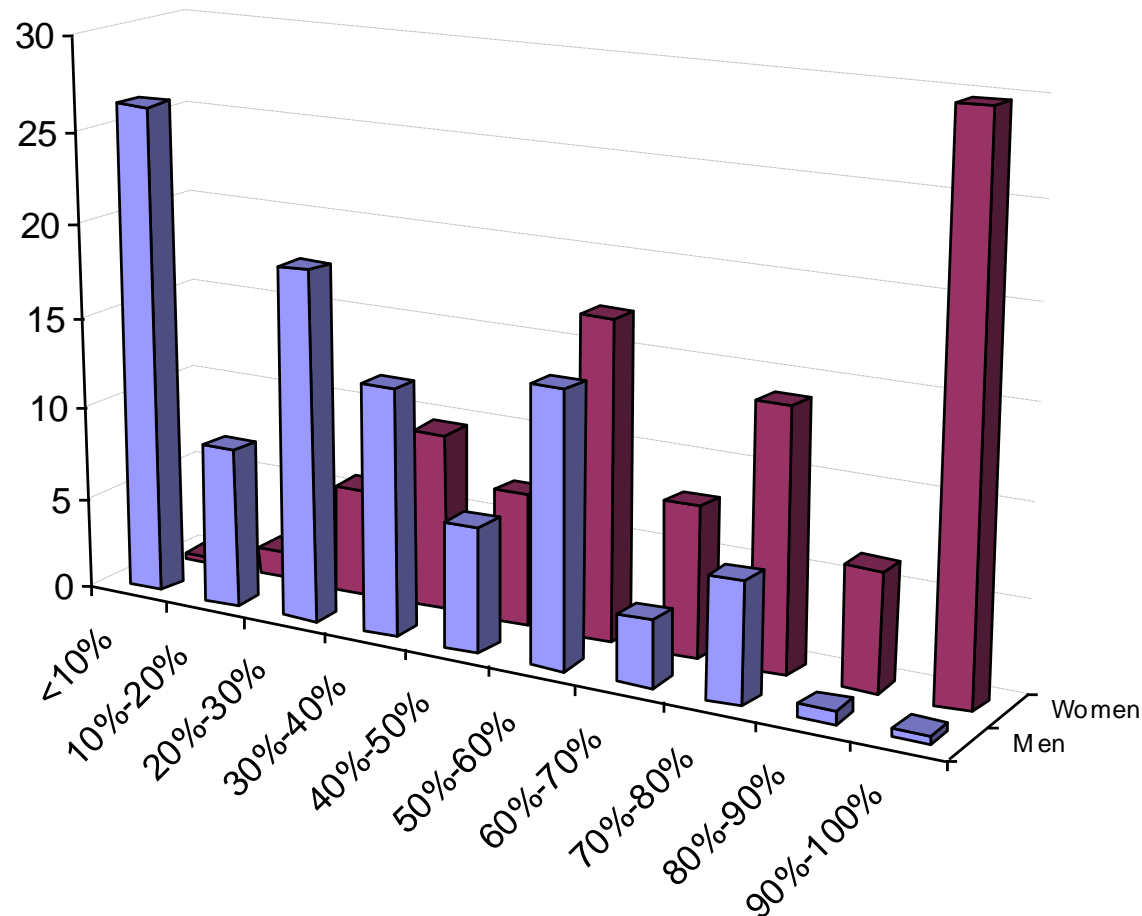


Most people work in occupations
dominated by their own sex



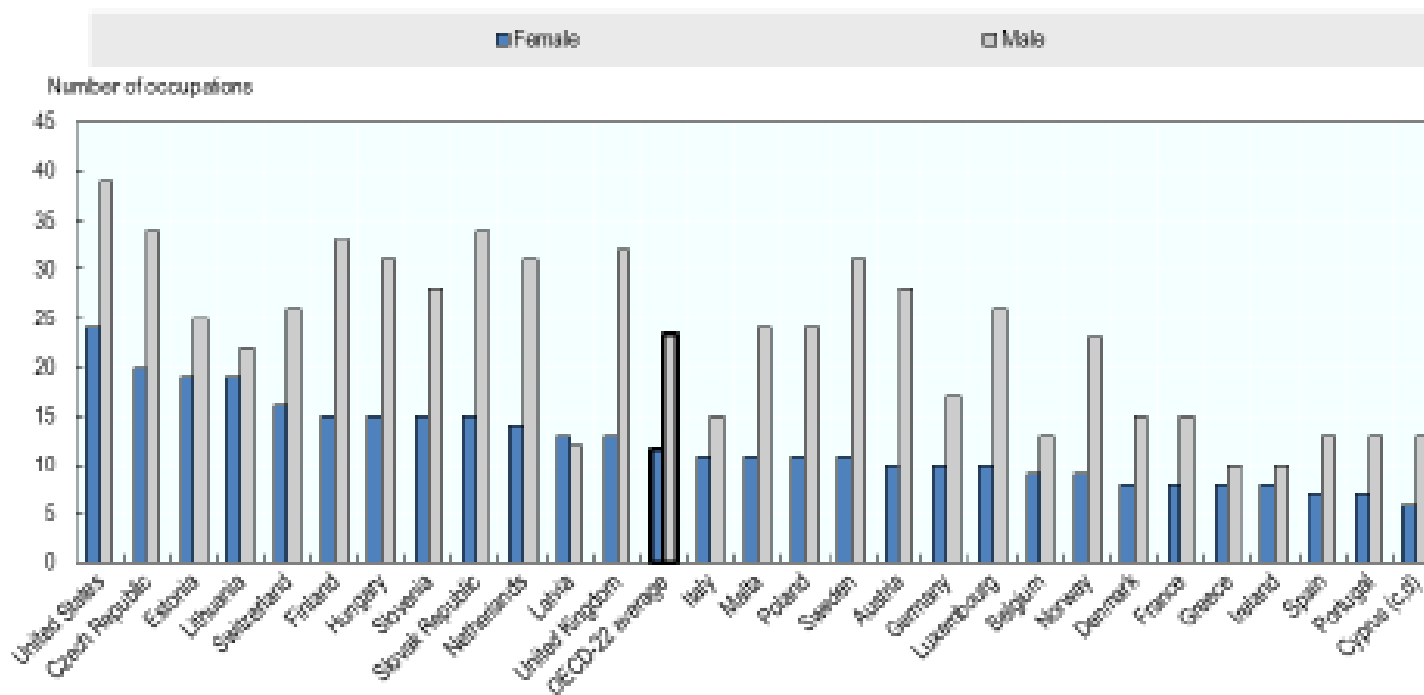
Source: Cohen (2015)

Figure a2. Proportion of Female in Respondents' Occupation (%) by Gender, Spain (2005)



Source: ESS. Spanish-sub sample (2005) Polavieja (2006)

Chart LMF1.6.E. Number of occupations that account^a for half of total employment, by sex, 2009^b



a) Occupations are measured at the detailed 4-digit ISCO classification level

b) Data for the United States refer to 2010

c) See note b) in Chart LMF1.6.A

d) See note d) in Chart LMF1.6.A

Source: [European Labour Force Survey 2009](#); [For the United States: Current Population Survey March 2010](#)



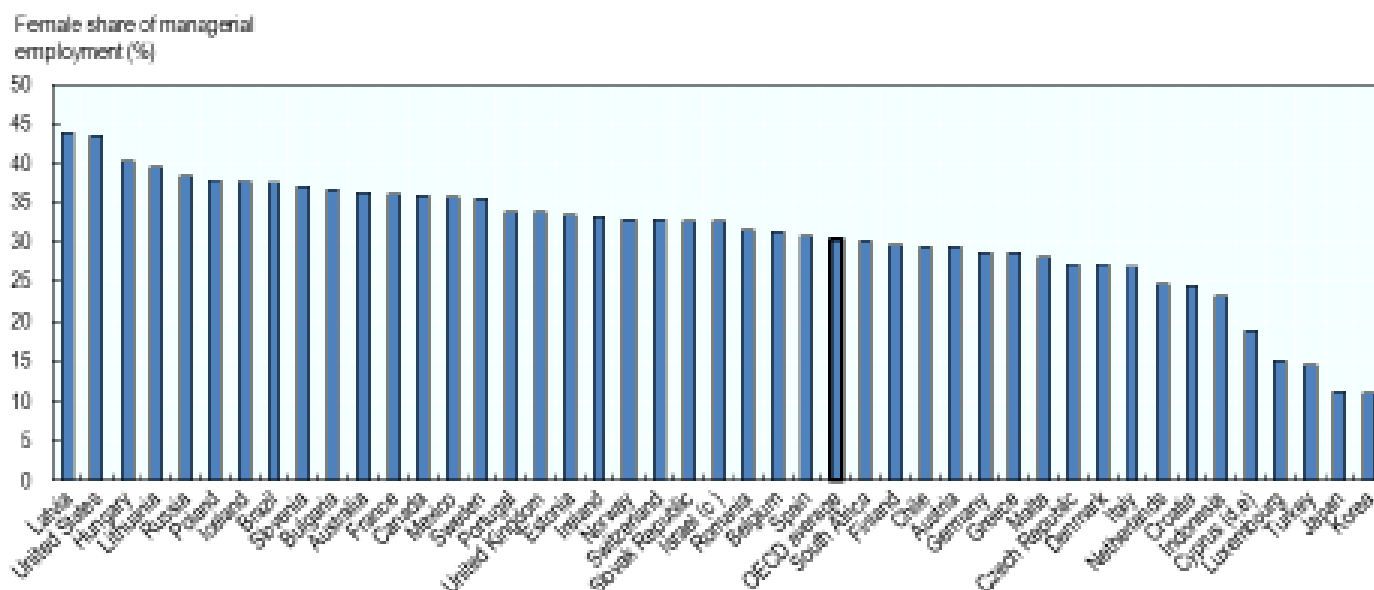
Women are concentrated in fewer
occupations



Managerial occupations tend to be mostly male-dominated (i.e. there is a “vertical” dimension to occupational segregation)

Vertical segregation (the “glass ceiling”)

Chart LMF1.6.F. Female share of managerial employment, 2013^a
Proportion of persons employed as managers^b that are female



a) Data for Korea refer to 2012

b) For Brazil, Canada, Chile, Indonesia, Russia and the United States: percentage of employees that hold jobs classified in International Standard Classification of Occupations (ISCO) 08 category one (as legislators, senior officials and managers) that are female. For all other countries: percentage of employees that hold jobs classified in International Standard Classification of Occupations (ISCO) 08 category one (as managers) that are female.

c) See note b) in Chart LMF1.6.A

d) See note c) in Chart LMF1.6.A

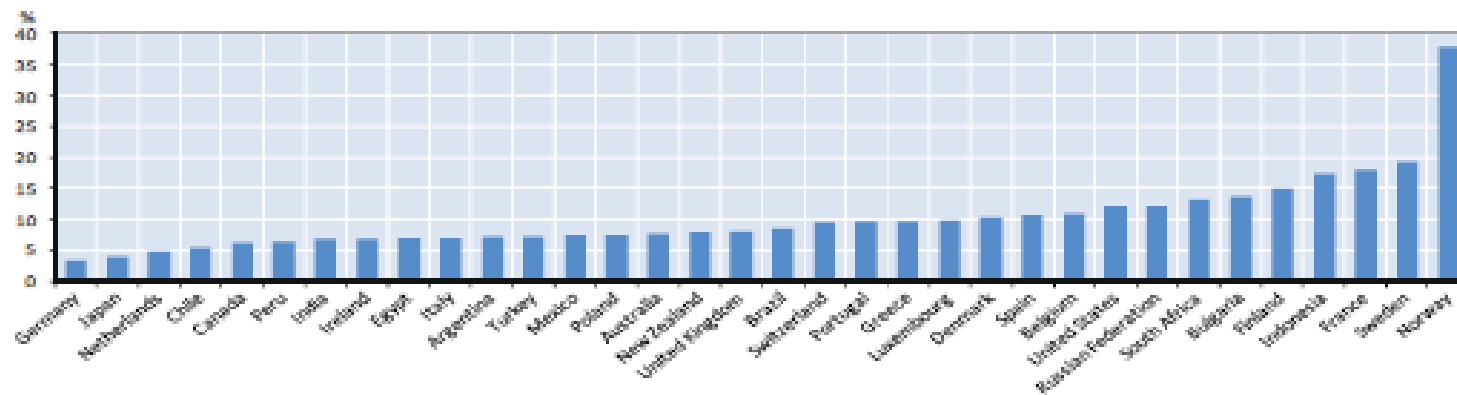
e) See note d) in Chart LMF1.6.A

Source: ILO (2015), "ILOSTAT Database", ILO Department of Statistics

Vertical segregation (the “glass ceiling”)

Figure 3.5.1. Norway has the largest proportion of women on boards of listed companies

The share of women on boards in listed companies by country, 2009



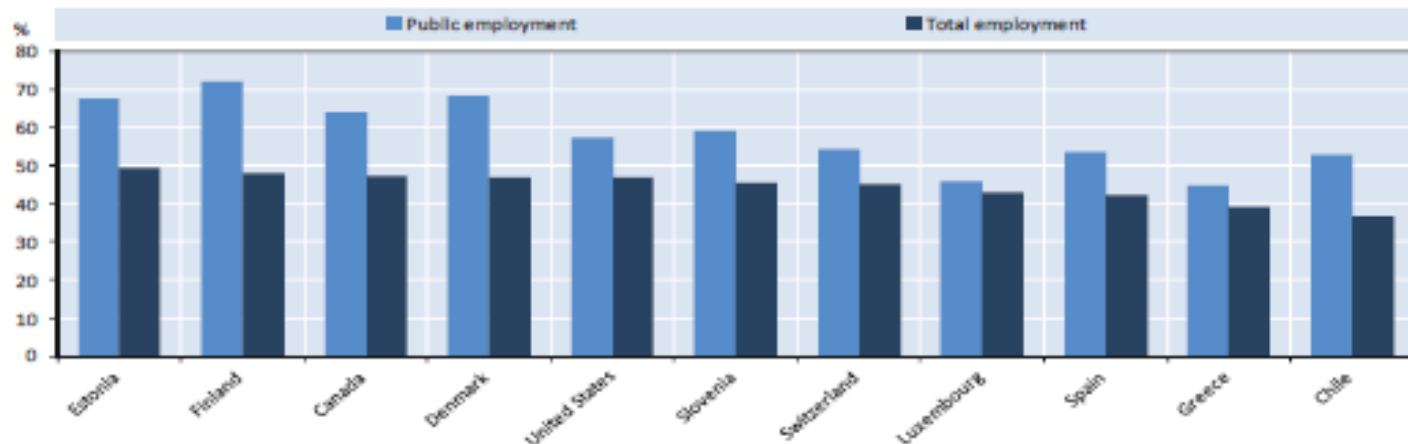
Notes: Countries are ordered by increasing share of women on board. The minimum sample size is 200 observations. Results for Austria, the Czech Republic, Estonia, Hungary, Iceland, Slovenia and the Slovak Republic were dropped due to small sample sizes.

Source: OECD Secretariat tabulations on basis of ORBIS data (see also Ragoussis and Gonnard, 2011).

Women are overrepresented in the public sector....

Figure 3.6.1. Women make up a significant share of public sector employment

Percentage of women in total employment and in public sector employment, 2008

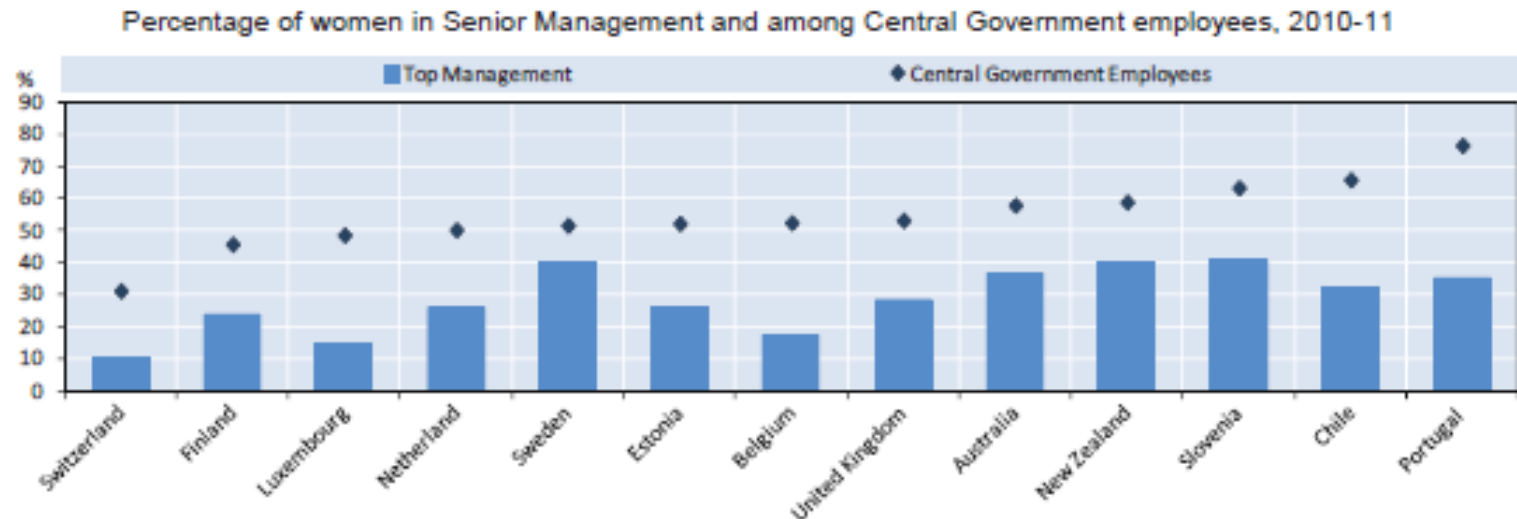


Note: (i) Countries are ordered by decreasing proportion of women in total employment; (ii) The total public sector workforce includes national, regional and local governments plus institutional units controlled by government such as public corporations. Data for Canada include the federal/provincial/municipal levels of government.

Source: ILO (2012b), LABORSTAT Database.

...but they are underrepresented in senior management position within the civil service

Figure 3.6.2. The Government leaky pipeline: Women's under-representation in Senior Management in the Central Civil Service



Note: Countries are ordered by increasing proportion of women as Central Government employees; Data for Estonia includes also officials of special services (police, military, and judges). Central Civil Service is defined as those branches of the public sector that are not legislative, judicial, or military and in which employment is usually based on competitive examination.

Source: OECD (2011r). Data for Belgium, Luxembourg, Sweden and New Zealand from 2011. All other data from 2010.



A common summary measure for overall segregation is the **dissimilarity index**

Dissimilarity Index

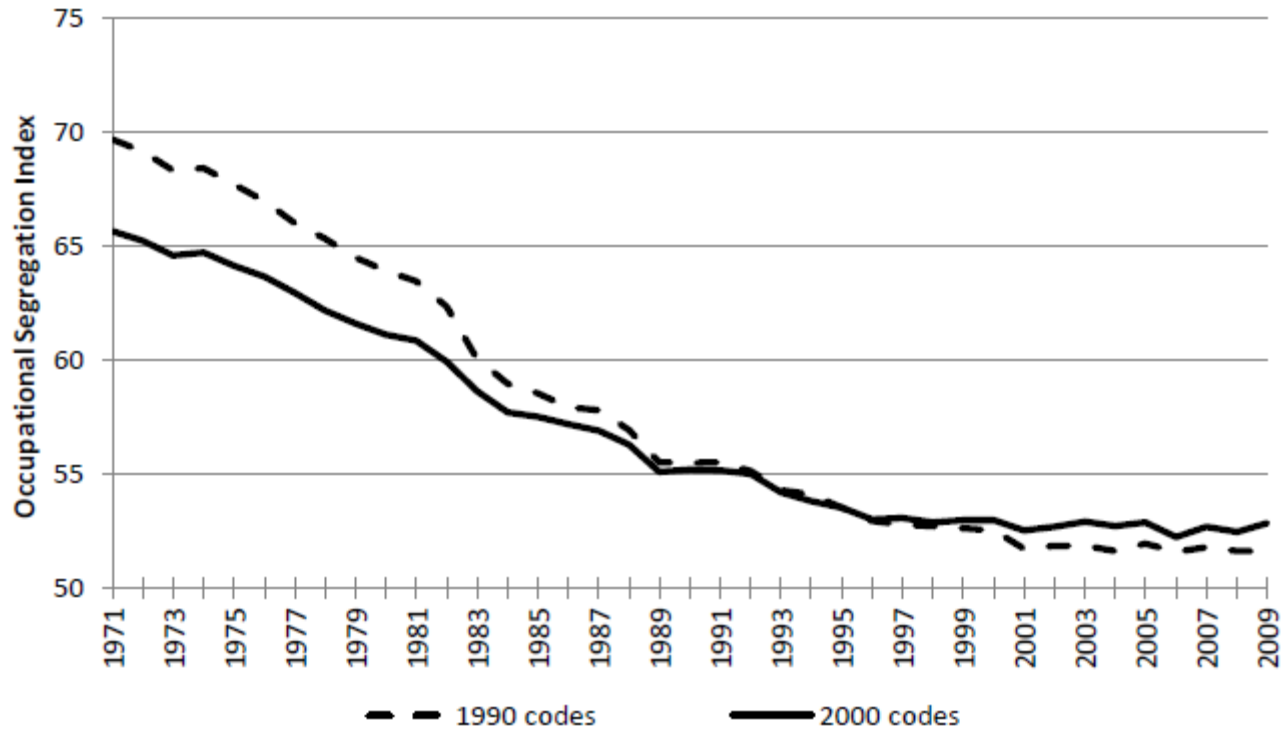
$$D = \frac{1}{2} \sum_{i=1}^N \left| \frac{w_i}{W} - \frac{m_i}{M} \right|$$

- w_i = the N of women in occupation i
- W = Total N of women in employment
- m_i = N of men in occupation i
- M = Total N of men in employment
- D = The index score can be interpreted as the percentage of men (or women) that would have to change occupations in order to produce an even distribution of the sexes across occupations (one that matches the distribution of men and women in the total employed population)
- D ranges from 0 to 100



We can use the index e.g. to monitor changes in segregation over time...

Figure 1: Trends in Occupational Segregation Using Gender-Specific CPS Crosswalk (March CPS Data)



Notes: Estimates for years 2000-2002 employ actual (noncrosswalked) data from the BLS dual-coded data set.

Source: Blau, Brummund and Liu (2012) for the US

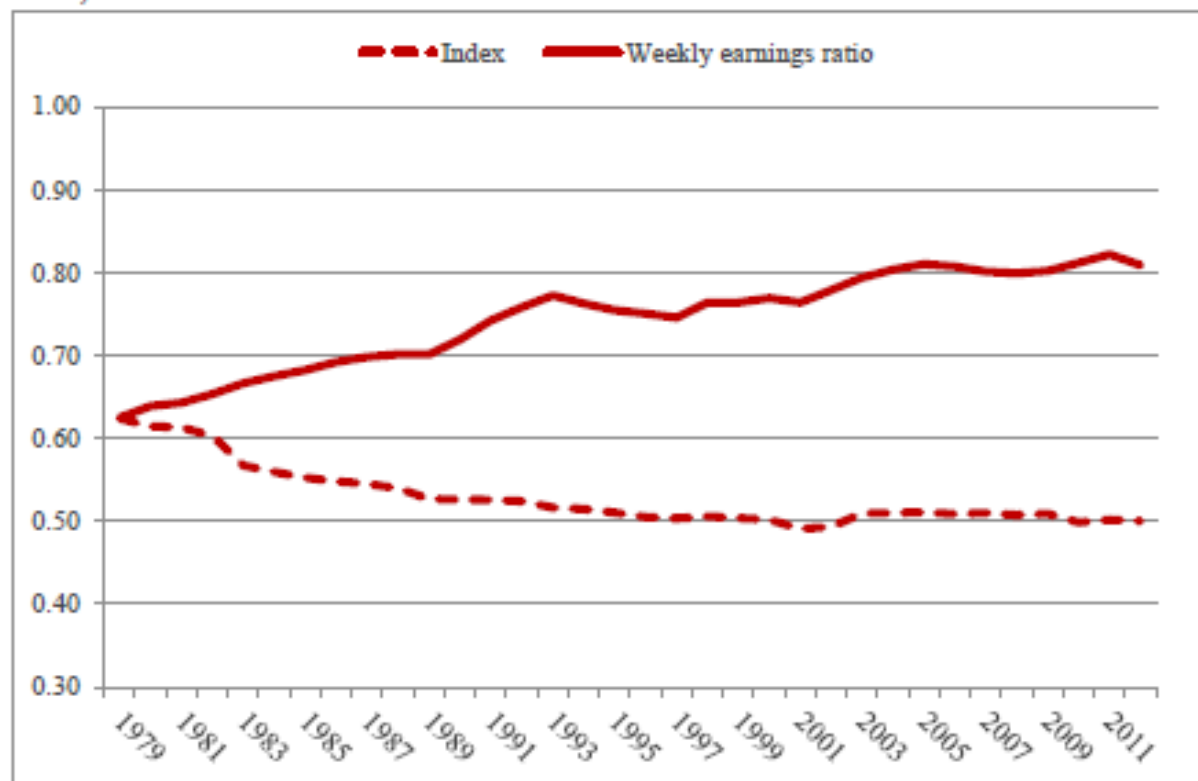


Occupational segregation plays a **crucial** role in explaining the gender pay gap



According to several estimates, up to 90% of the wage gap can be explained by sex-segregation in different jobs (see e.g. Peterson & Morgan 1995; Tomaskovic-Devey 1993; Polavieja 2008; 2009;2012)

Figure 5: Change in the Index of Occupational Segregation and the Gender Earnings Ratio, 1979 to 2012



Note: The Index of Occupational Segregation is calculated all workers aged 16 and older; the Gender Earnings Ratio is calculated for full-time workers aged 15 and older.

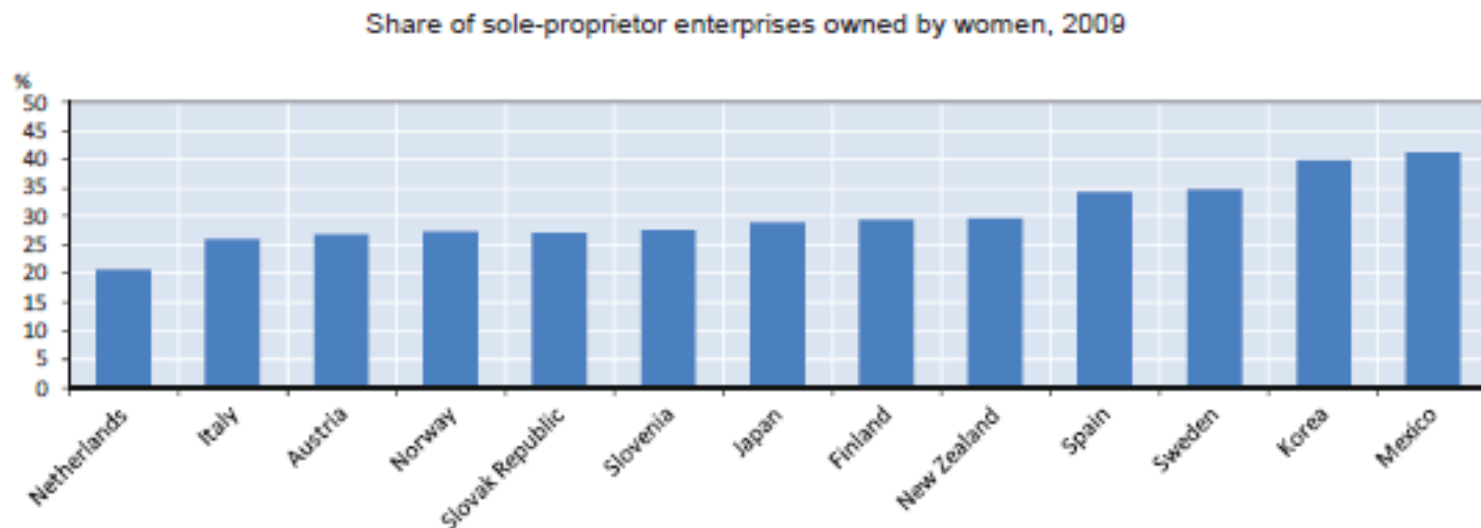
Source: Authors' calculation based on the Current Population Survey, March/Annual Social and Economic Supplement (ASEC), as provided by King et al. (2010). Weekly earnings ratio based on U.S. Department of Labor Bureau of Labor Statistics (2013), Table 16

Gaps in entrepreneurship

Employers are predominantly
male

Most enterprises are owned by men...

Figure 4.1.2. The proportion of individually-owned enterprises with a female owner varies between 20 and 40% across OECD countries



Note: (i) Countries are ordered by increasing proportion of female-owned enterprises. (ii) Data refer to employer enterprises, with the exception of Japan, for which the data refer to male and female proprietors with and without employees. (iii) Data for Norway are for 2010. (iv) Data for the Netherlands do not include service activities classified as NACE rev.2 sections P to S: given that female owners tend to be more prevalent in service industries, this data coverage can explain the relatively low share observed in the Netherlands.

Source: OECD estimates based on special tabulations from National Statistical Institutes.

..and women's ownership of top firms is negligible

Table 4.1.1. The share of women-owned enterprises decreases among largest firms

Share of majority women-owned companies in top decile of employment, asset values, and shareholder capital of the ORBIS database (2009)

	% of women-owned companies among top 10% companies by:		
	Employment	Assets	Shareholder capital
Austria	3%	3%	3%
Czech Republic	3%	10%	10%
Denmark	0%	7%	8%
Estonia	1%	12%	12%
France	2%	9%	9%
Germany	0%	4%	4%
Greece	6%	10%	10%
Hungary	2%	8%	10%
Iceland	1%	9%	11%
Ireland	0%	6%	8%
Italy	1%	15%	18%
Luxembourg	0%	3%	4%
Norway	13%	14%	16%
Poland	1%	7%	9%
Portugal	5%	11%	14%
Slovak Republic	3%	5%	7%
Slovenia	7%	3%	3%
Spain	4%	10%	12%
Switzerland	5%	0%	0%
Turkey	0%	6%	8%
United Kingdom	0%	9%	12%

Note: the table indicates the shares of women-owned firms by typology of firms over the total of women and men-owned companies, thus excluding firms with mixed ownership from the total. The sample is restricted to enterprises where natural persons hold at least 50% of the company's shares. The OECD-Orbis database is the output of treatment of raw data provided to the OECD under copyright by Bureau van Dijk Electronic Publishing. It contains structural and financial information for millions of companies worldwide. The companies included in the OECD-Orbis database were classified as men or women-owned enterprises using information on the gender of the shareholders. See the Annex to Part 4 for further detail on data and definitions.

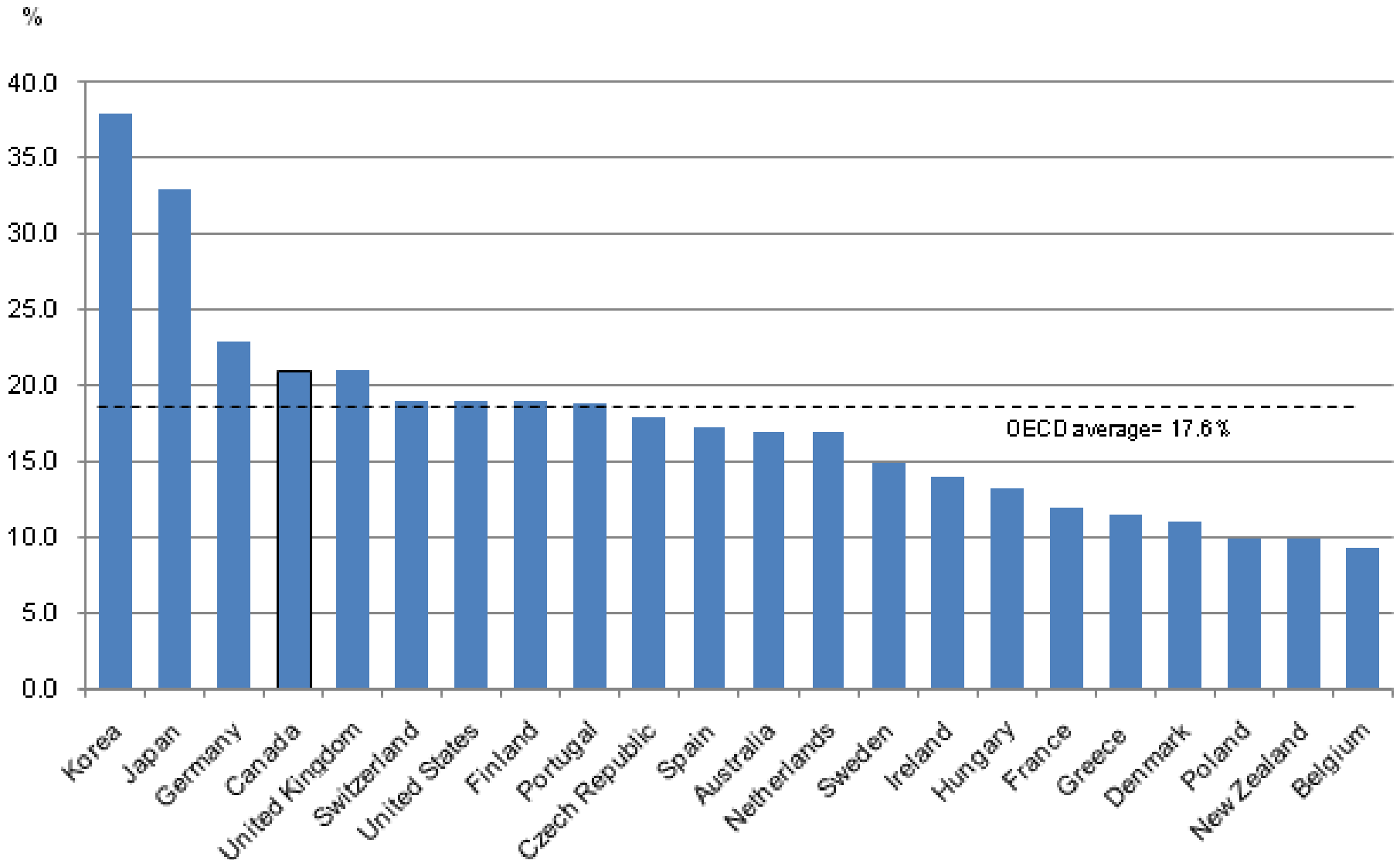
The Gender Pay-Gap

Women earn less than men on
average

The gender pay gap: measures

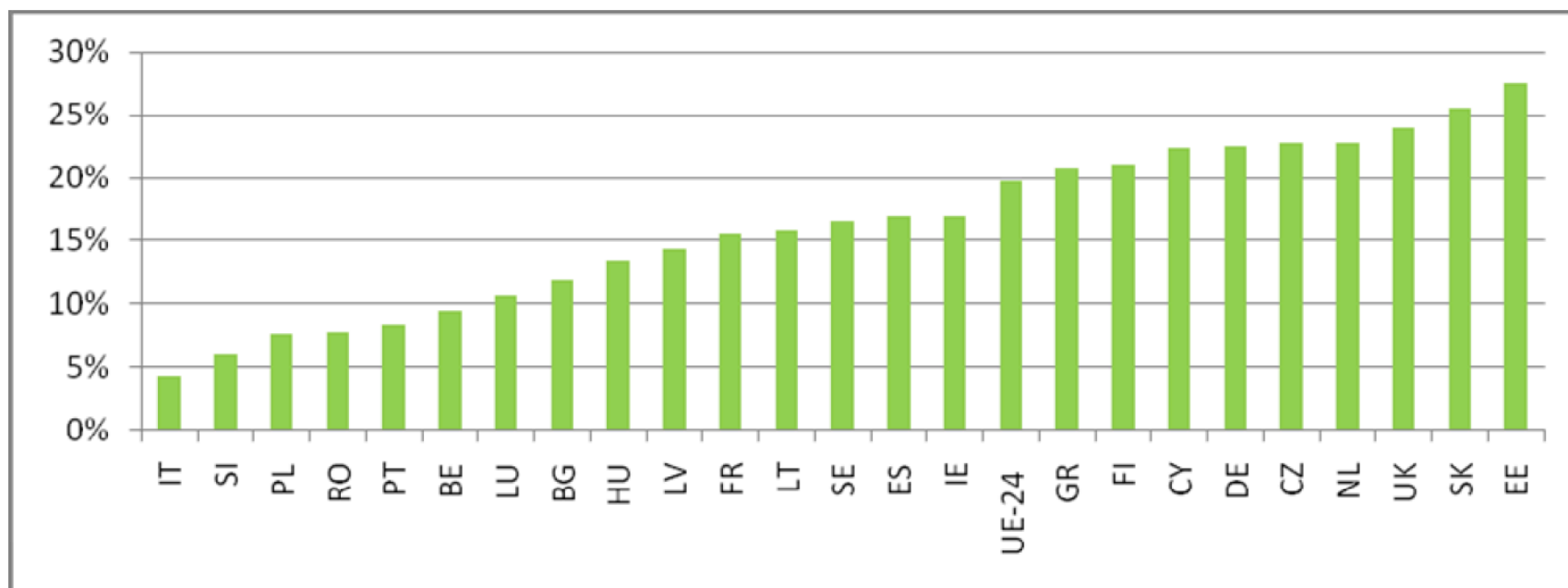
- The average (mean) wage gap refers to the % by which women's pay is lower than men's
- Median pay gaps are calculated using median earnings instead of mean earnings
 - Median pay gaps tend to be lower than average pay gaps because the mean is affected by very high earners (i.e. a few top earners pull up the average) and there are more high earners among men
- Pay gaps can be calculated using data for full-time earnings or using both full-time and part-time earnings
 - Because women are overrepresented in part-time work and because wages per hour tend to be lower in PT work, gender pay gaps are larger when calculated using all earners
- For comparison, it is important to know whether gaps are calculated using the mean or the median and whether full-time or all earners are included

Gender Gaps in Median Earnings of Full-Time Employees (2006)



Source: OECD 2010

Figure 2: Average gross hourly pay gaps for women and men working full time and part time (in euro), countries arranged in increasing order of the pay gap (2006)

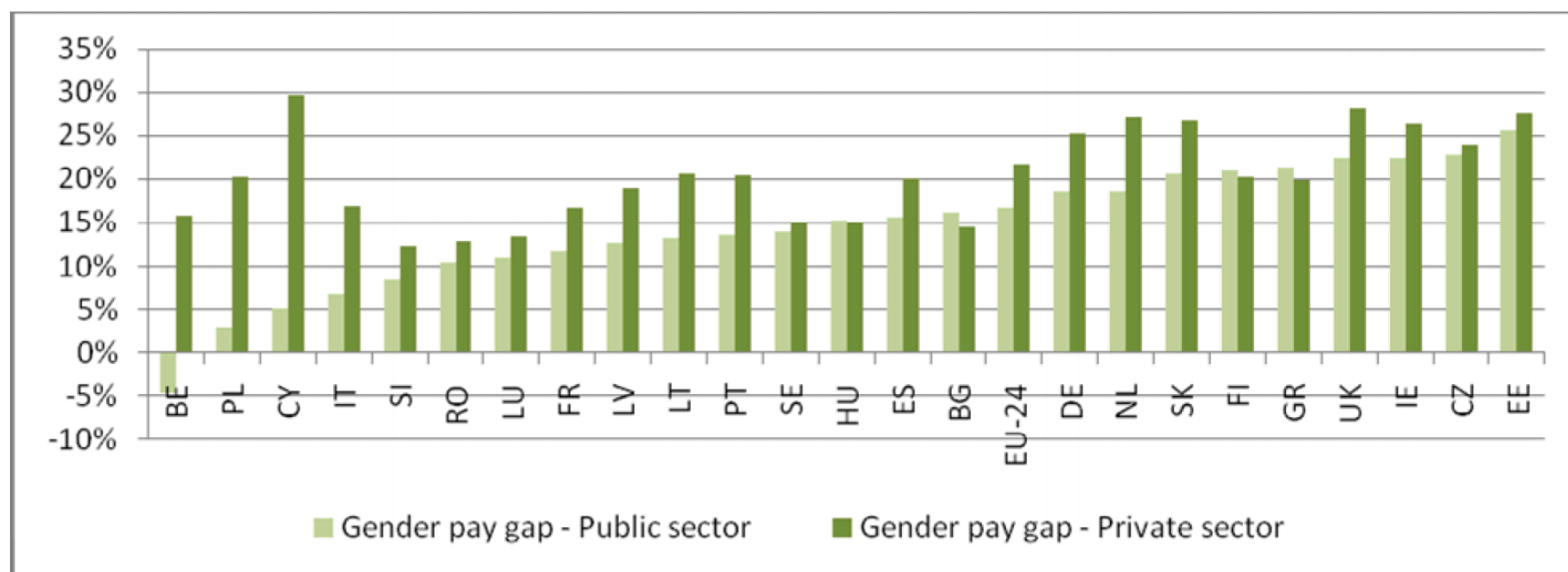


Source: Structure of Earnings Survey

Source: The Council of the European Union (2010)

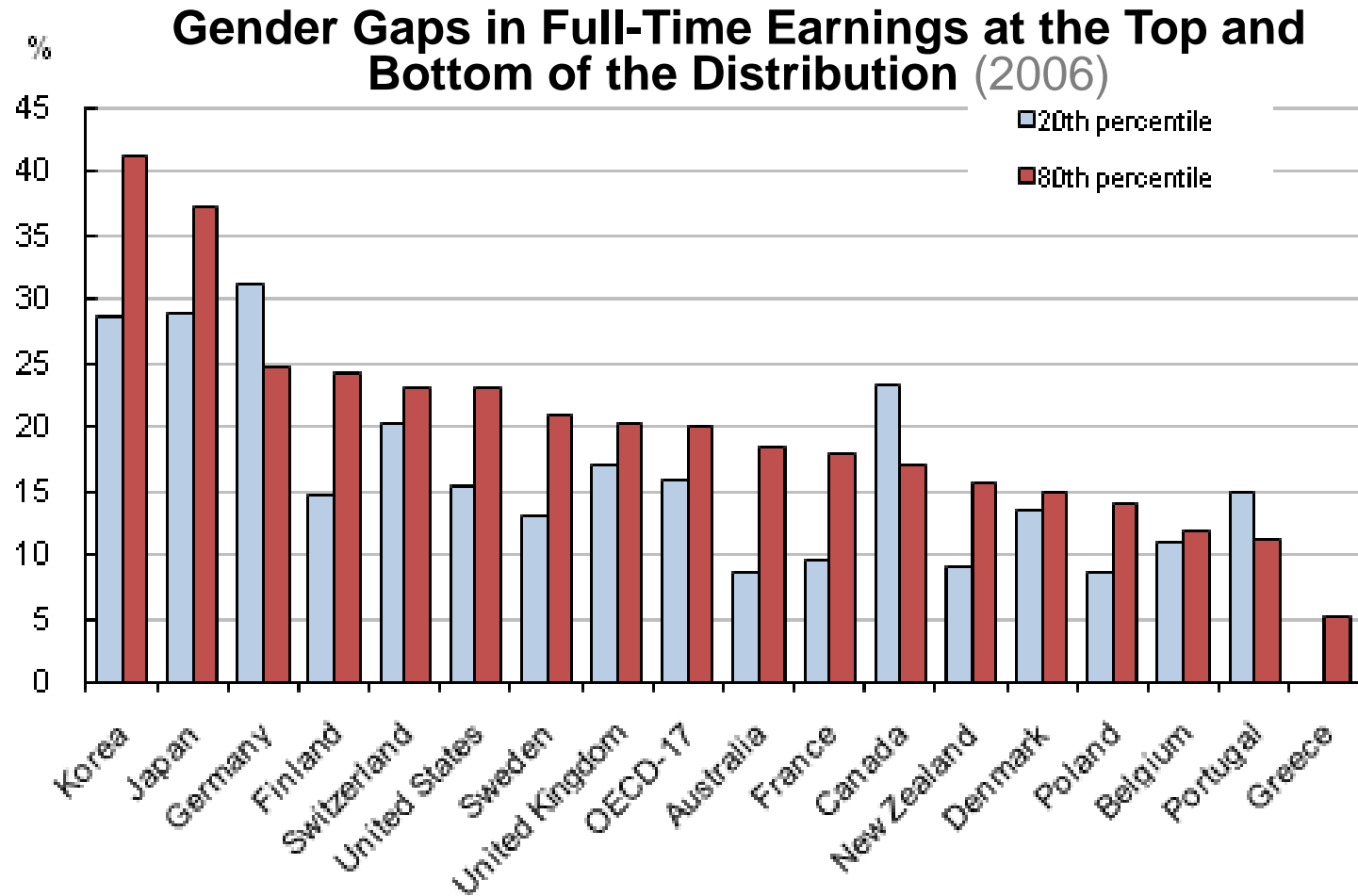
Gaps are typically larger in the private sector

Figure 6: Gaps in average gross hourly earnings of women and men working full time and part time in the public and private sectors (in euro), countries arranged in increasing order of the pay gap in the public sector (2006)



Source: Structure of Earnings Survey

Gaps are typically larger at the top of the pay distribution

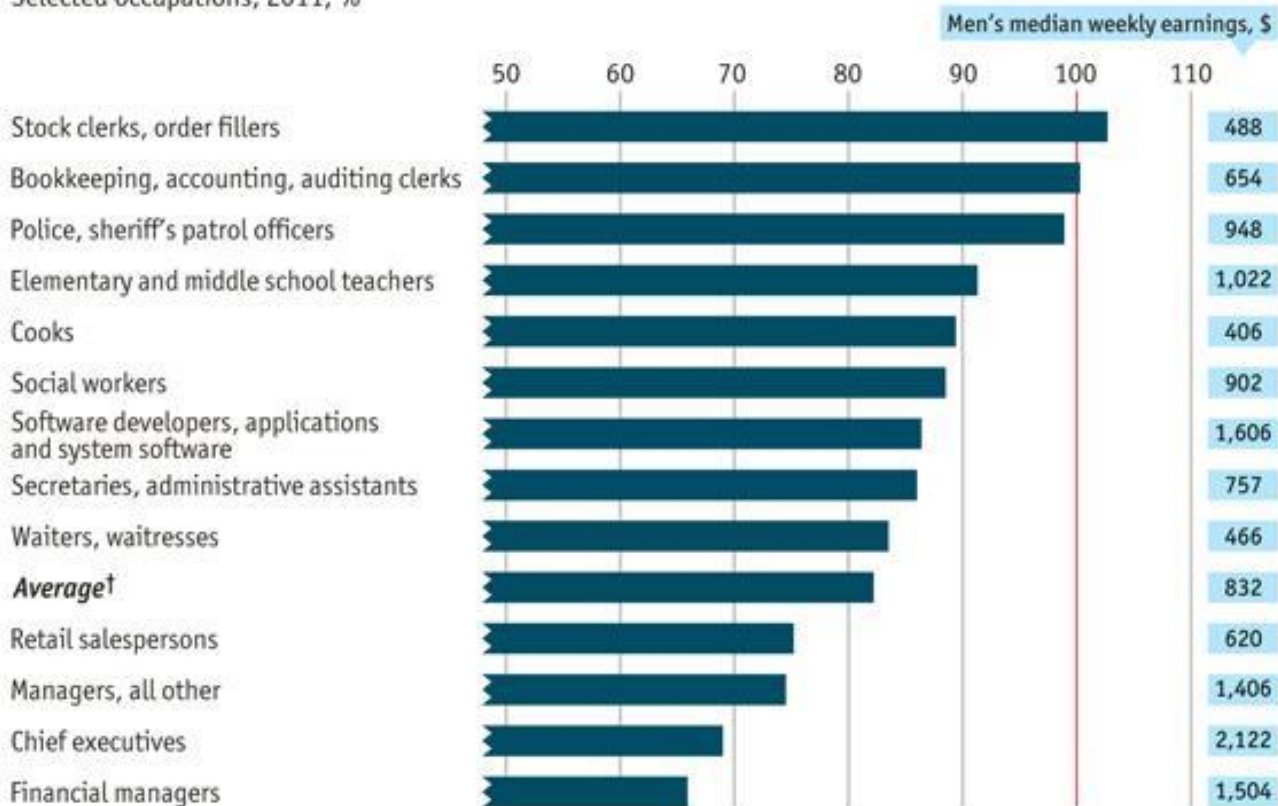


Gap larger in managerial occupations

(data for the US 2011)

US gender wage gap*

Selected occupations, 2011, %

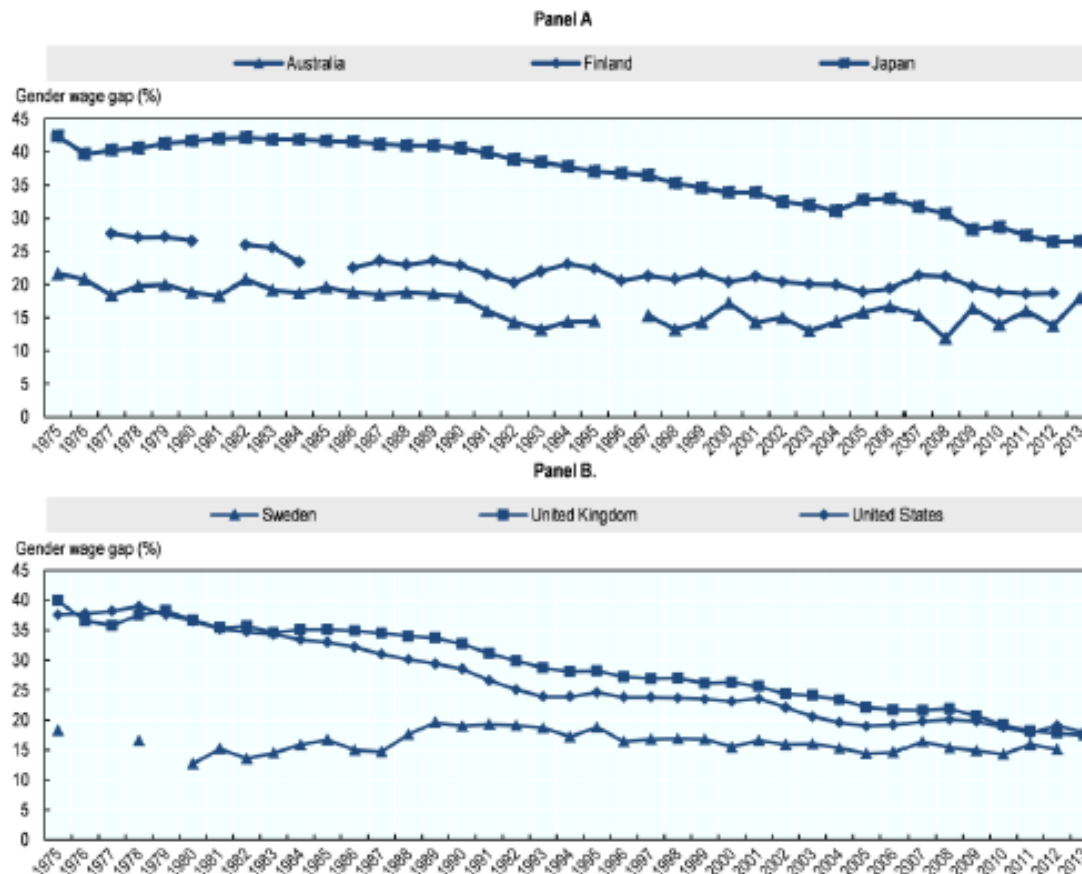


Source: Institute for Women's Policy Research

*Women's median weekly earnings as a % of men's, full-time workers. †All workers

Gender gaps are falling in most OECD countries

Chart LMF1.5.B. Trends in the gender gap in median earnings^a of full-time employees, selected countries, 1975-2013



a) The gender wage gap is unadjusted, and is calculated as the difference between median earnings of men and women relative to median earnings of men. Estimates of earnings used in the calculations refer to gross earnings of full-time wage and salary workers. However, this definition may slightly vary from one country to another.

Source: OECD Employment Database

Decomposing the Gender Pay-Gap

Explained and unexplained
components

Wage decomposition (Oaxaca-Blinder)

Men's factual earnings → $S_i^{\text{♂}} = \beta_i^{\text{♂}} X_i^{\text{♂}} + e_i^{\text{♂}}$ (i.e. the wages men really get in the LM)

Women's factual earnings → $S_i^{\text{♀}} = \beta_i^{\text{♀}} X_i^{\text{♀}} + e_i^{\text{♀}}$ (i.e. the wages women really get in the LM)

Women's counterfactual earnings → $S_i^{*\text{♀}} = \beta_i^{\text{♂}} X_i^{\text{♀}} + e_i^{\text{♀}}$ (i.e. what women would get in a neutral LM)

$$\underbrace{S_i^{\text{♂}} - S_i^{\text{♀}}}_{\text{Gross wage gap}} = \underbrace{\beta_i^{\text{♂}} (X_i^{\text{♂}} - X_i^{\text{♀}})}_{\text{Differences in assests}} + \underbrace{(\beta_i^{\text{♂}} - \beta_i^{\text{♀}}) X_i^{\text{♀}}}_{\text{Differences in returns}}$$

Gross wage gap =

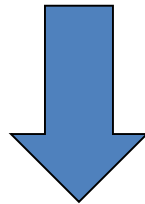
Differences in assests + Differences in returns

Explained component + Unexplained component

(This captures
discrimination but also
differences in relevant
unobserved assests)

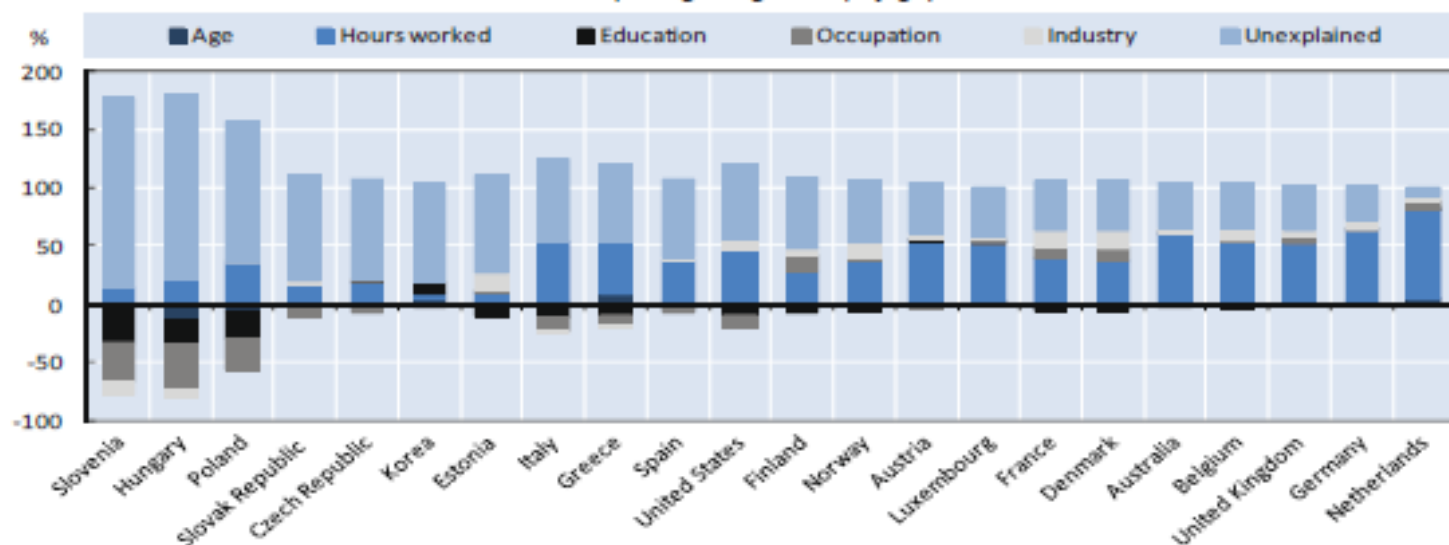
2 implications...

- Discrimination is measured indirectly (i.e. if there is D it will appear in the residual component), hence:
- Any wage difference that is not captured by the explained component will necessarily appear in the residual component
 - E.g. If wages depend on a given unobserved characteristic X_u and women have less of that characteristic than men, then the residual component will be larger but this does not necessarily imply discrimination (unless there is D in access to X_u)



It is therefore crucial to identify correctly the assets that matter for determining individual wages

Figure 3.3.3. Differences in hours worked and the type of job explain part of the gender pay gap
Decomposing the gender pay gap



Note: Countries are ordered by decreasing proportion of unexplained gender pay gap. The country selection differs from Figure 3.3.1. because survey data to perform the decomposition analysis is lacking for some countries.

Sources: OECD Secretariat estimates, based on EUSILC (2008), HILDA (2008), CPS (2008), KLIPS (2007).

The mommy penalty

Children are a key driver of
gender gaps

The mommy penalty

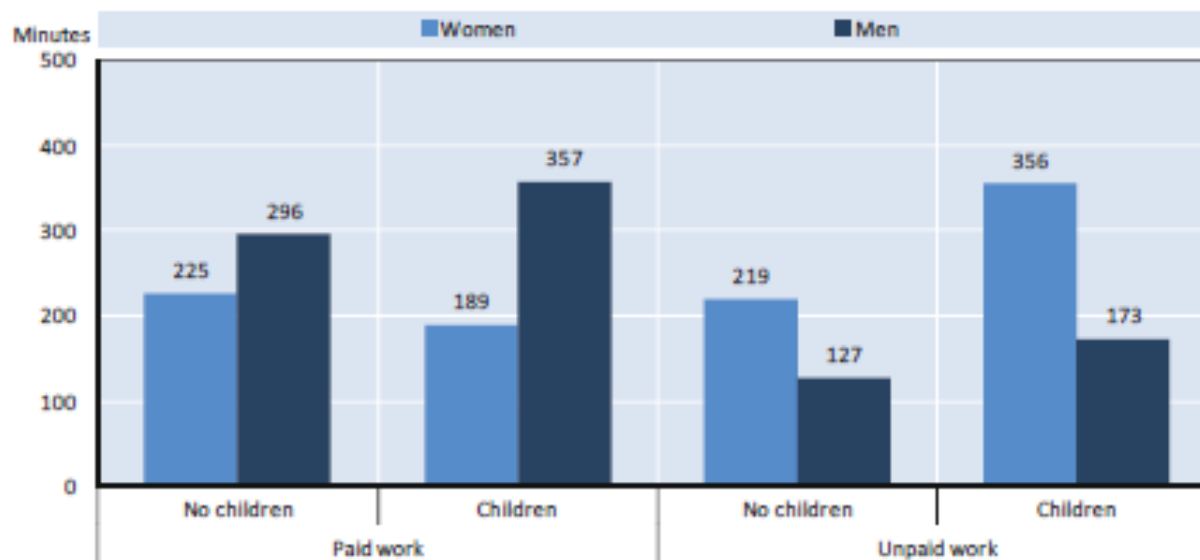
- Motherhood is a crucial driver of gender gaps in both paid and unpaid work



Gender gaps in both paid and unpaid work increase with the arrival of children

Figure 3.7.4. Gender gaps in unpaid and paid work increase with the arrival of children

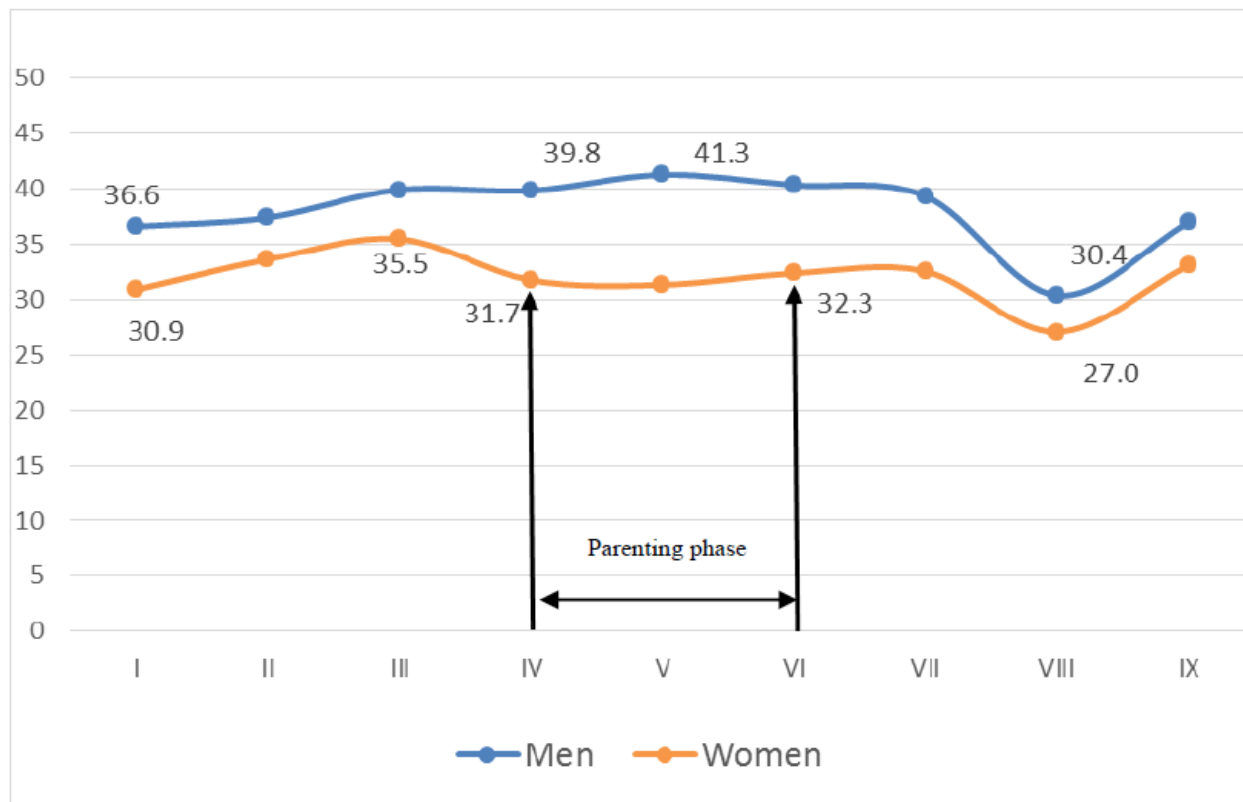
Minutes devoted to paid and unpaid work per day by gender, for people with and without children (OECD average)



Source: OECD's Secretariat estimates based on national time-use surveys.

Working-time gaps increase in parenting phase...

Figure 2: Average weekly working time across the life course among employees by sex*, EU28

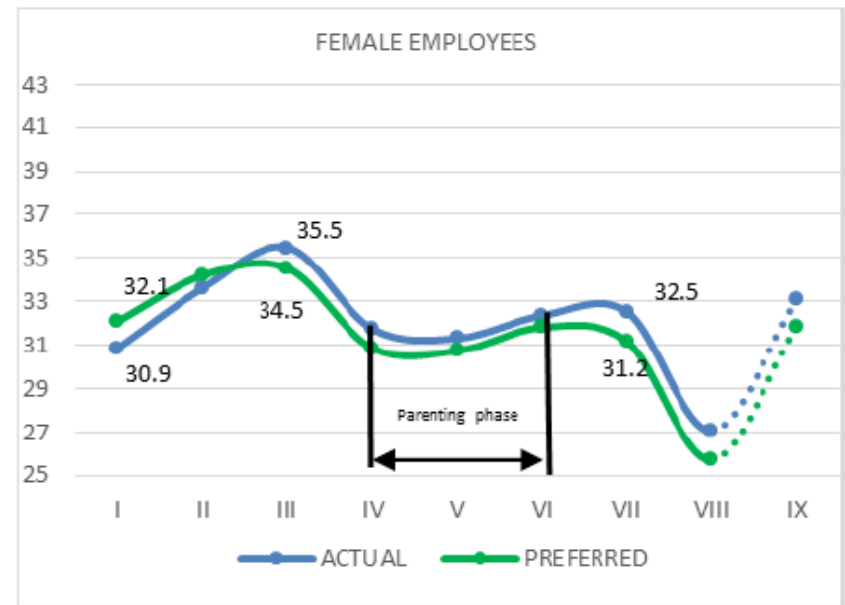
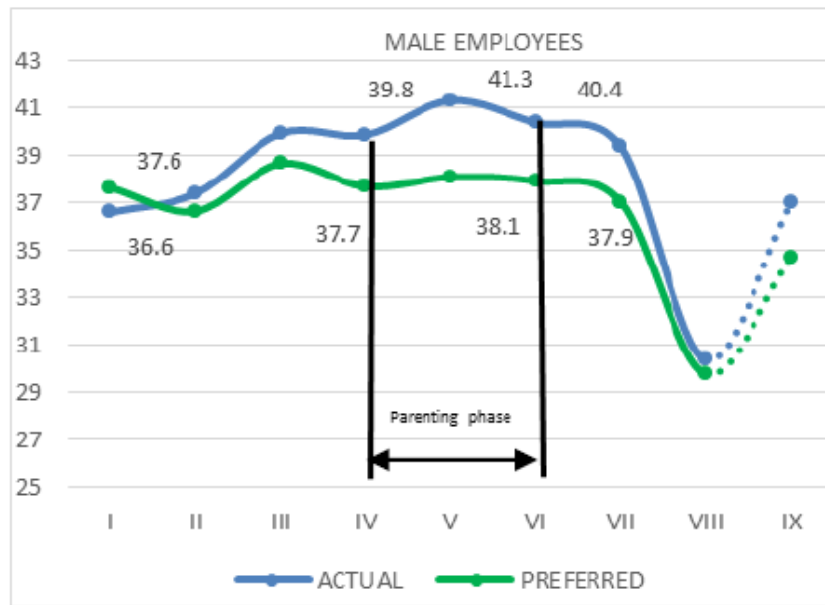


Source: Eurofound, European Working Conditions Survey 2015.

Notes: * I Single persons (18-35 years), living with their parents or relatives; II Single persons (under 46 years), without children; III Younger cohabiting couples (woman under 46 years), without children; IV Cohabiting couples with youngest children under 7 year; V Cohabiting couple with young children between 7-12 years; VI Cohabiting couple with teenage children between 13-18 years; VII Midlife 'empty nest' couples without resident children; VIII Older cohabiting couples without resident children; IX Single persons (aged 50 years or older), without resident children.

...But it seems men would like to work less!...

Figure 3: Actual and preferred weekly working time across the life course among employees, by sex (hours per week), EU28

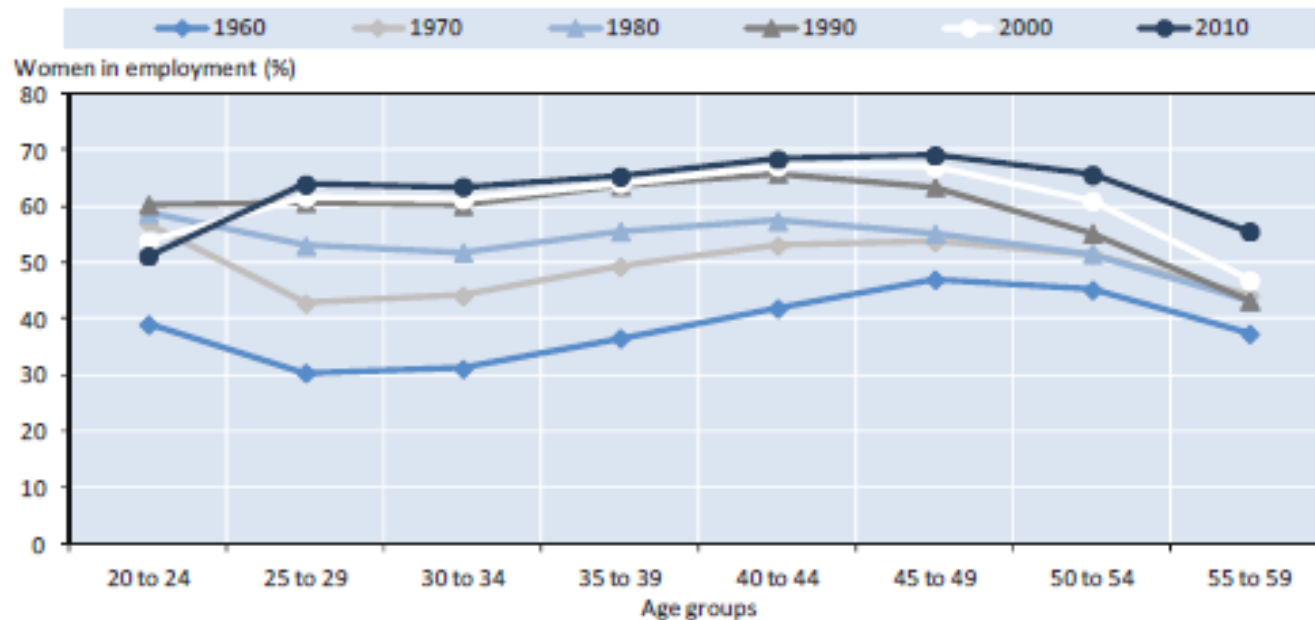


Source: Eurofound, Sixth European Working Conditions Survey 2015.

Less mommy penalty in employment over time....

Figure 3.1.5. More women are in paid work during the childbearing years than in the past

Age-employment profiles of women, 1960-2010

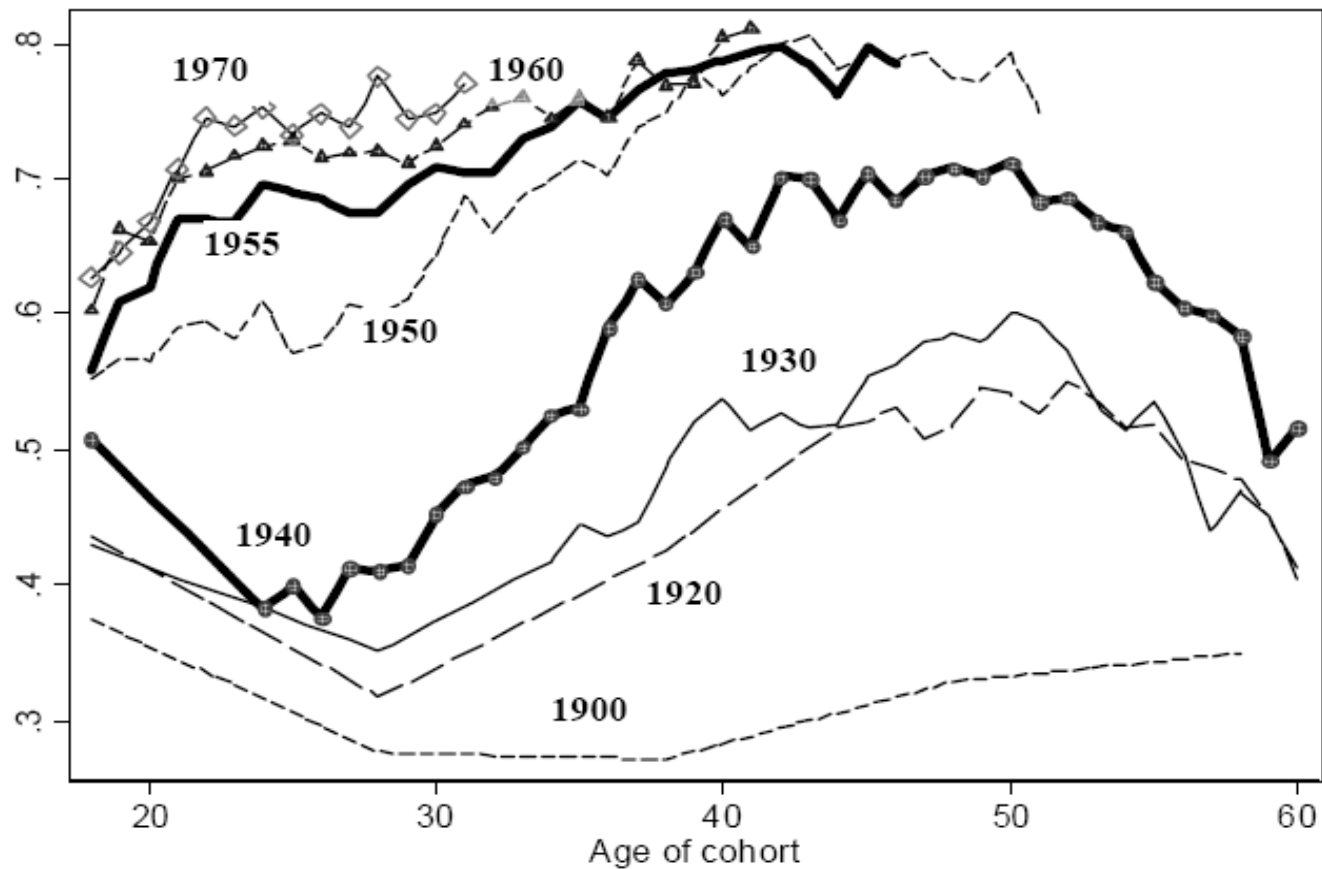


Source: OECD (2012b), OECD Employment database.

Changes in Labour Force Participation by Birth-Cohort, US

Figure III

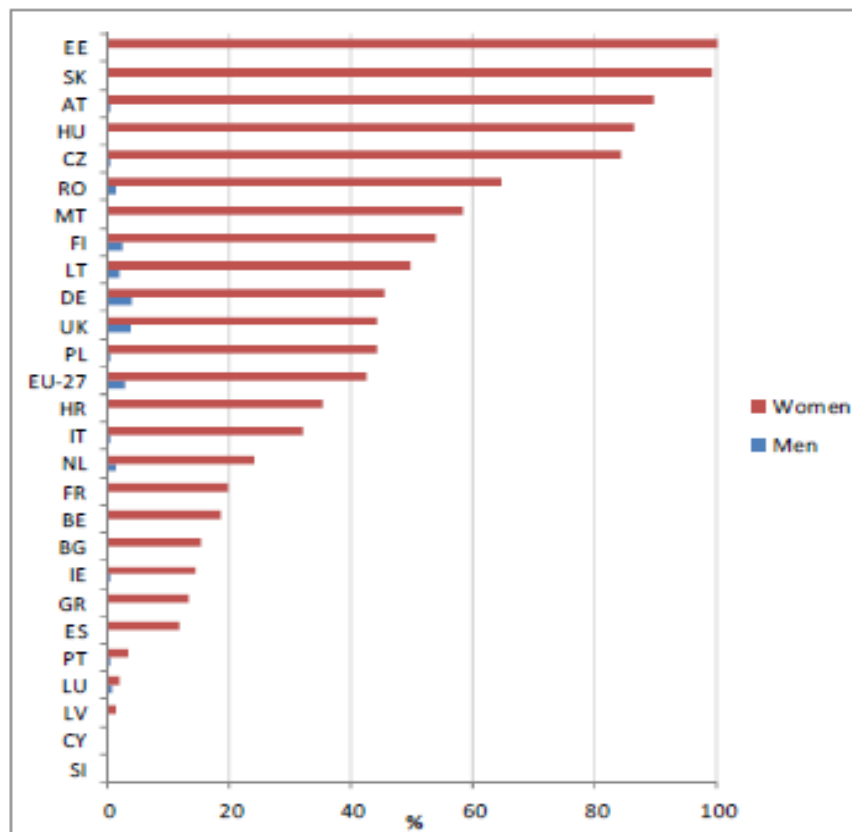
Age-specific labor-force participation rates, by cohort and age 1900-1970



Source: Bailey (2006) for the United States

Women much more likely to stop working

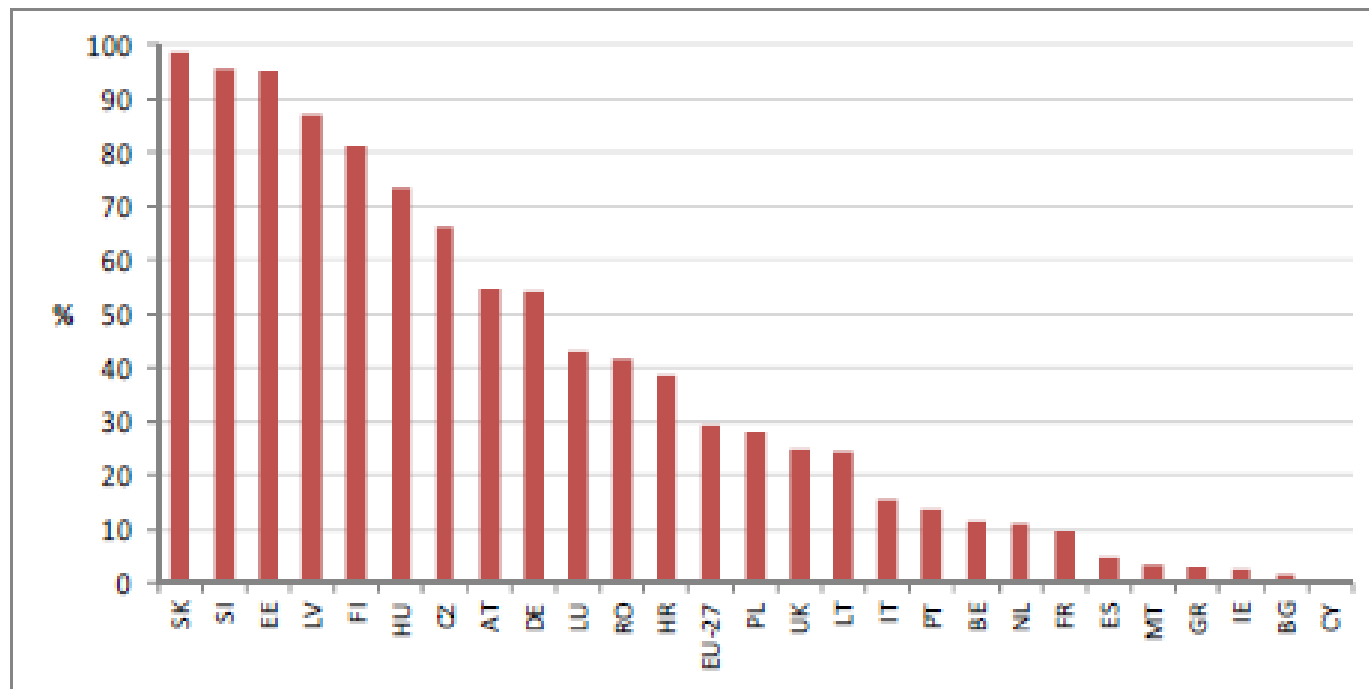
Figure 14: Proportion of parents who stopped working in order to take care of the youngest child in the household for at least one month (excluding maternity and paternity leave), men and women aged 20 to 49



Source: IFS 2010 Ad hoc module

...and to take extra full-time parental leave....

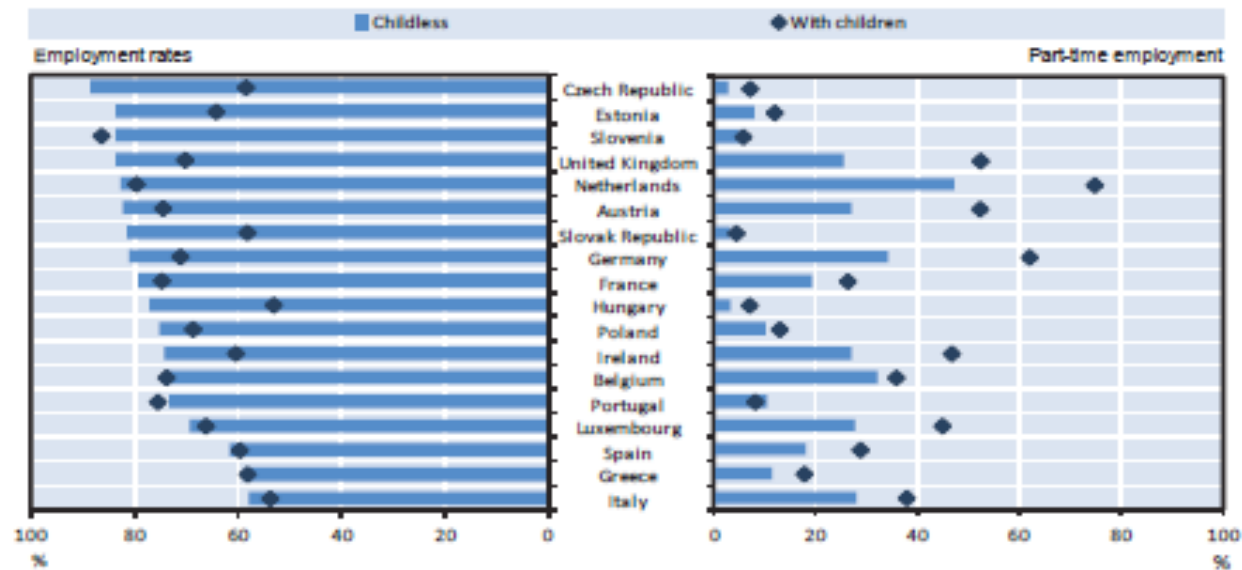
Figure 136: Proportion of eligible women who have taken full-time parental leave (excluding maternity leave) for at least one month to take care of the youngest child in the household



Source: LFS 2010 Ad hoc module

...mommy penalty in hours worked also persists

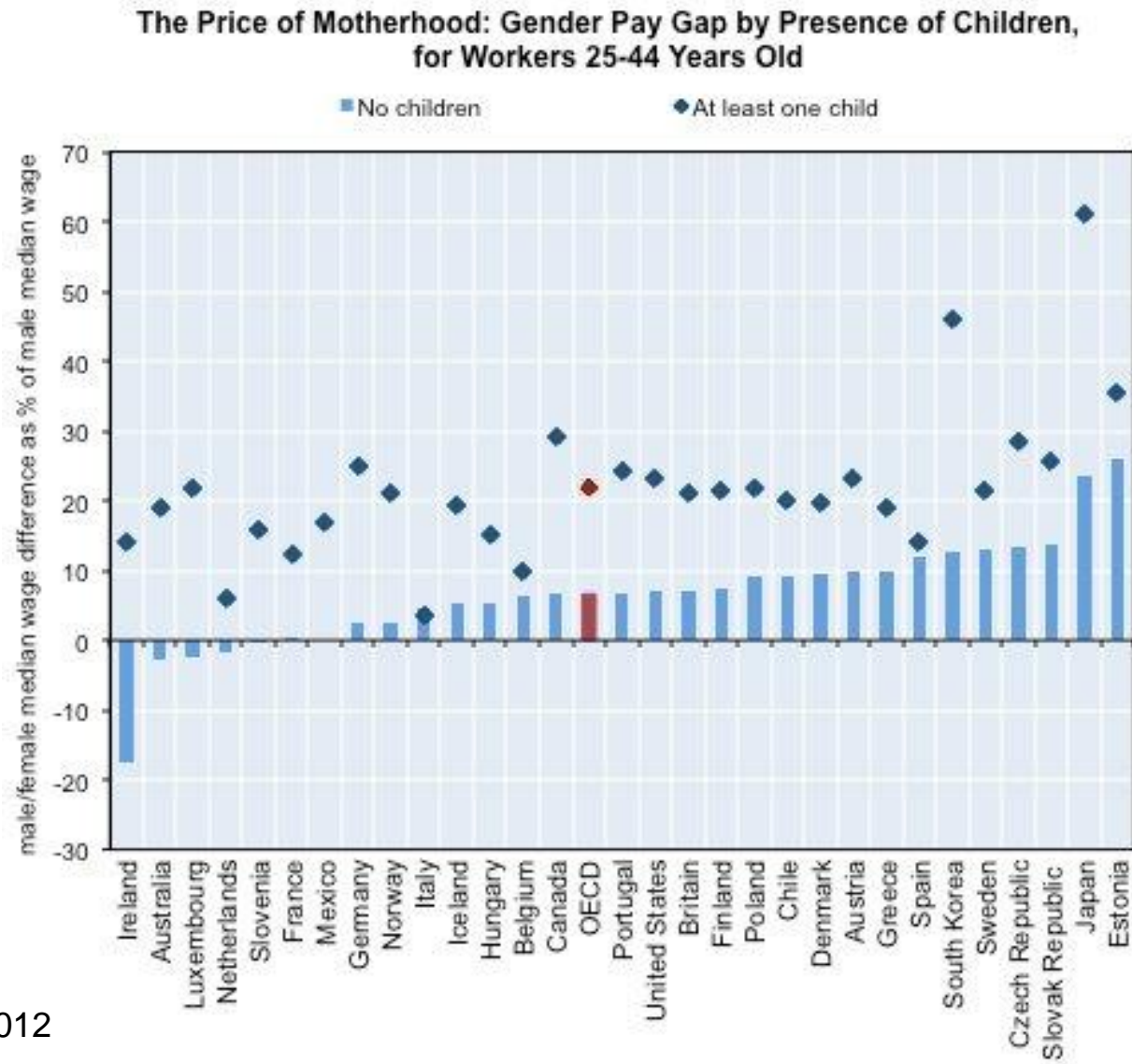
Figure 3.2.2. Motherhood makes part-time work much more likely
Percentage in each category of women aged 25-54 (childless/with children under 15), year 2009



Note: Countries are ordered by decreasing proportion of employment rates of childless women.

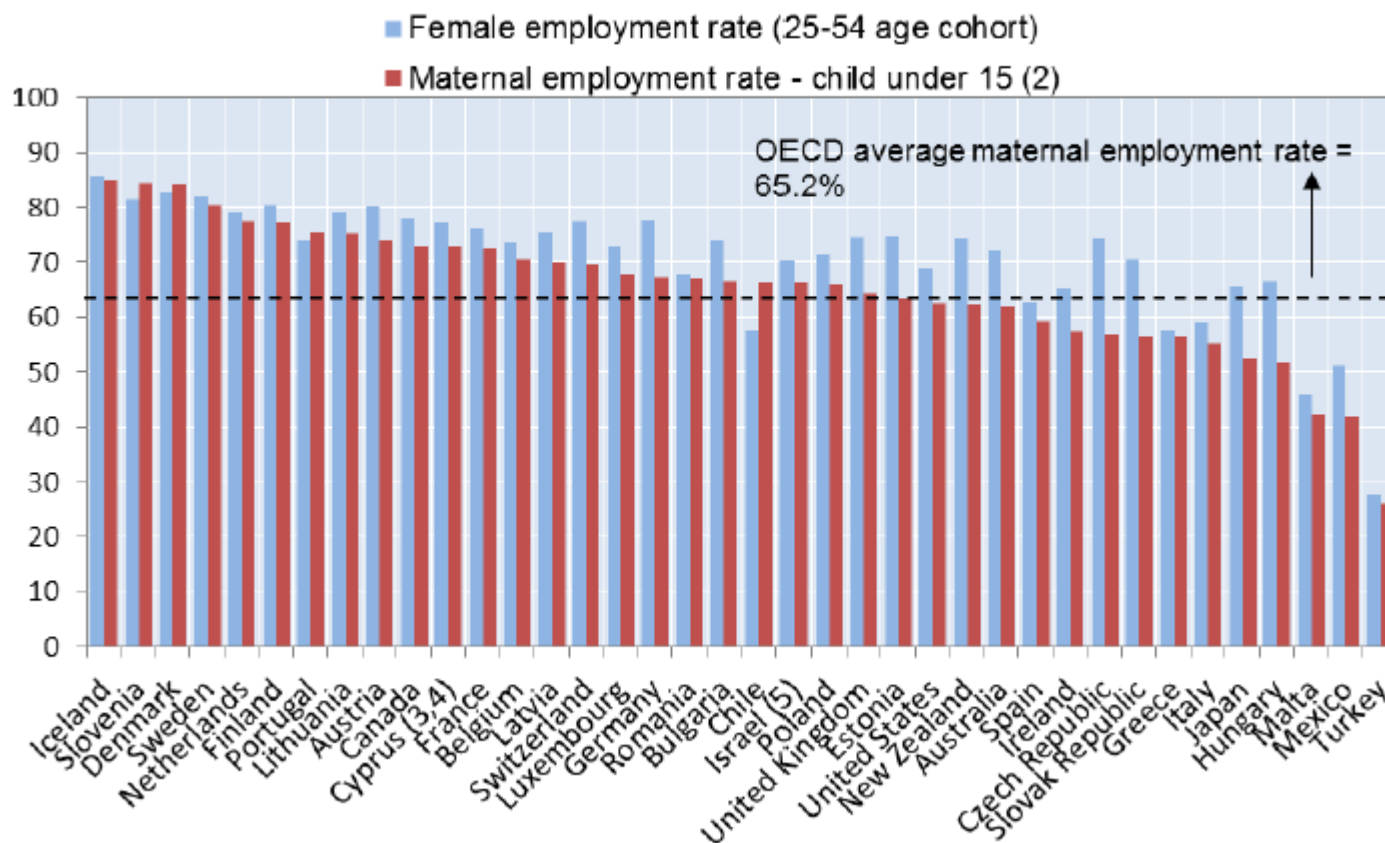
Source: Eurostat (2012a), EU LFS.

...and motherhood depresses earnings...

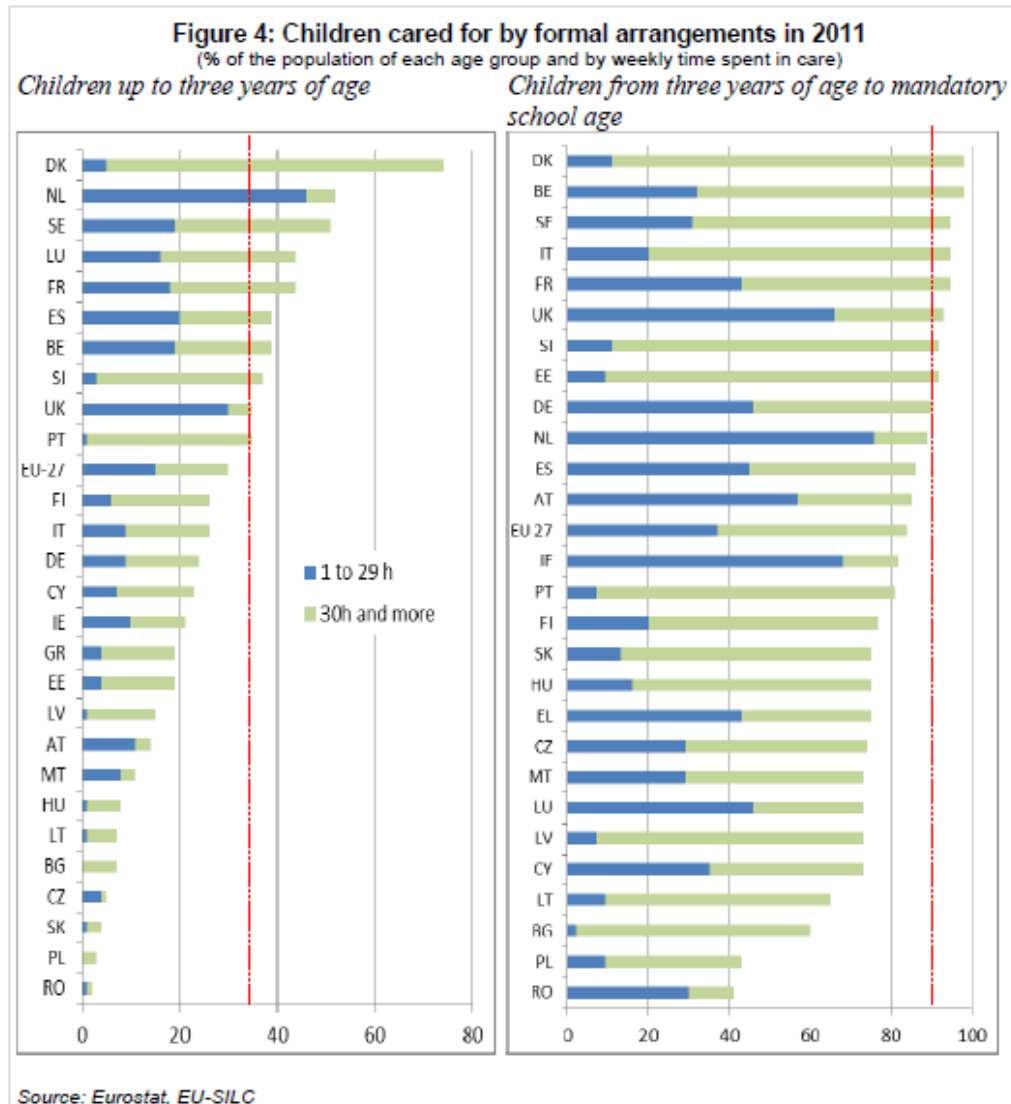


Motherhood gaps in employment differ greatly by country

Chart LMF1.2.A.I: Maternal employment rates compared to female employment rates, 2011¹

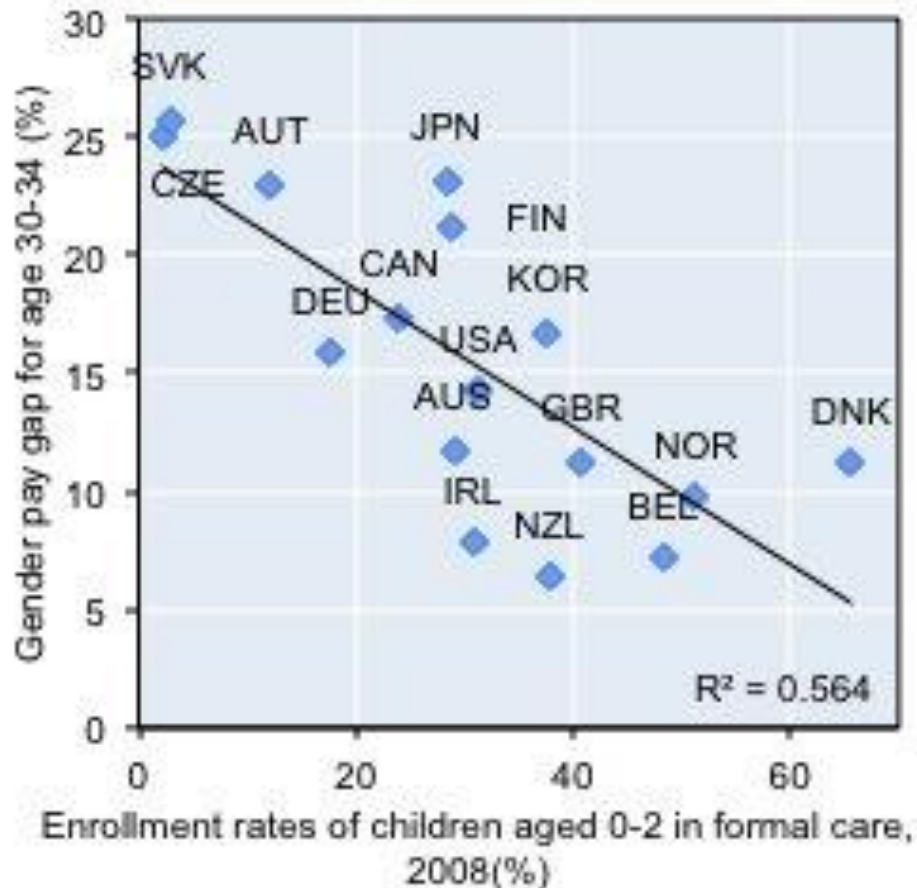


This might reflect country differences in childcare provision

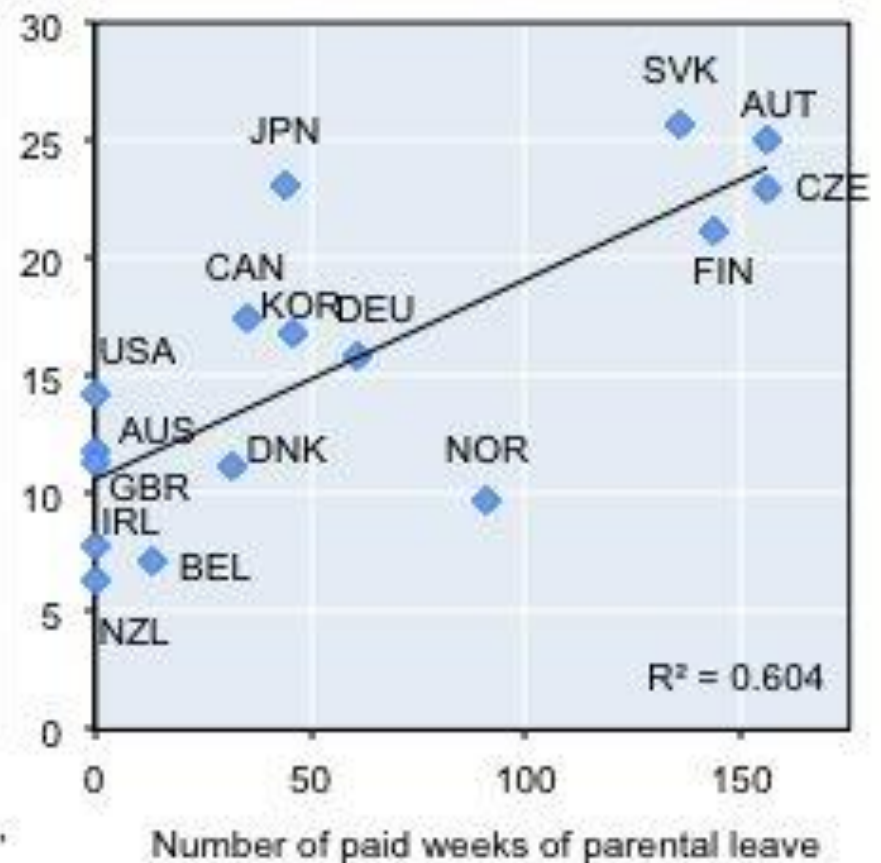


Childcare provision seems key to reduce pay gaps while parental leave increases them

Gender Pay Gap and Childcare Enrollment



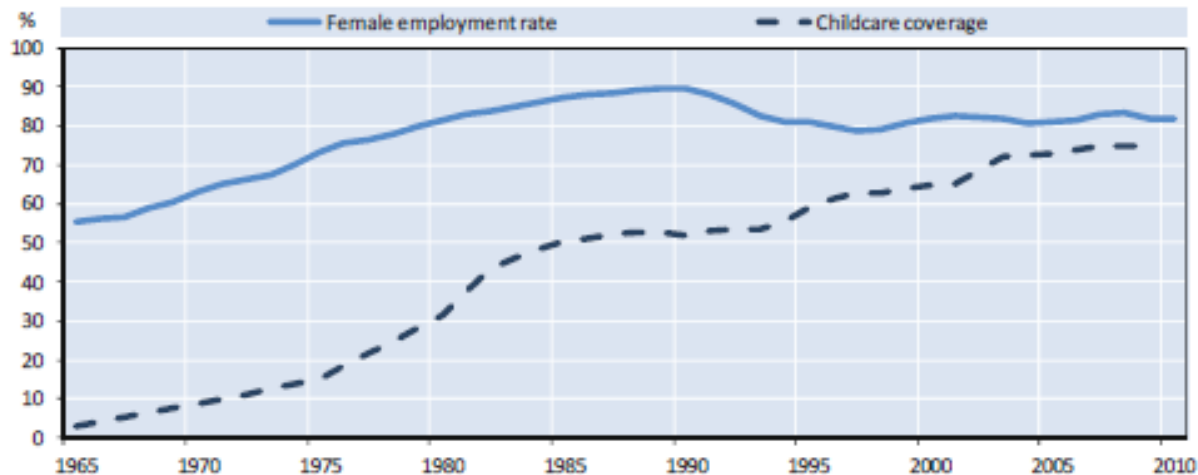
Gender Pay Gap and Parental Leave



The Swedish Work-Family Model

Figure Box 3.8.4. Formal childcare development contributed to increasing female employment

Female employment rates (women aged 25-54) and share of children (aged 0-6) using formal childcare, 1965-2010



Source: Female employment rates from OECD Labour Force Statistics, OECD, Paris; childcare data provided by the Swedish authorities for 1965-2002, and from NOSOSCO for 2003-2009.

Defamilialization policies in Sweden include 1) individual-based (rather than household-based) taxation (since 1971); 2) a generous public pre-school system; 3) parental-leave policies that promote gender sharing; 4) generously-funded reactivation programs

Some interesting links

- <http://reports.weforum.org/global-gender-gap-report-2014/>
- <http://www.oecd.org/els/family/database.htm>
- <http://www.worldbank.org/en/topic/gender>
- http://ec.europa.eu/eurostat/statistics-explained/index.php/Gender_statistics
- <https://www.oecd.org/gender/data/shareofwomengraduatesbyfieldofeducation.htm>
- <http://www.ilo.org/global/statistics-and-databases/statistics-overview-and-topics/gender/lang--en/index.htm>
- <http://www.pewresearch.org/fact-tank/2015/04/14/on-equal-pay-day-everything-you-need-to-know-about-the-gender-pay-gap/>
- <http://www.bsa.natcen.ac.uk/latest-report/british-social-attitudes-30/gender-roles/introduction.aspx>
- <http://www.nature.com/nature/journal/v465/n7301/full/4651006a.html>
- <http://politikon.es/temas/gid/> (in Spanish)